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ABSTRACT

This learning package is a three-semester-hour, independent-study course in community health services designed for postsecondary, external degree students. Keyed to the commercially published textbook "Community Health" (Boston, MA: Allyn and Bacon, 1970), the package contains a course administrator manual, a student unit study guide, and supplemental readings. The manuals describe the course and outline the roles and tasks of the tutor/grader and student. The study guide, which serves as the student's instructor telling him what material should be read, when to read it, and how to evaluate his progress, outlines specific course objectives and contains diagnostic tests, keys, and supplementary readings for the eight units which comprise the course. Among the unit topics are major health problems in the United States; the historical development of preventive medicine and public health; organization of federal, state, and local government agencies; voluntary health agencies; comprehensive health planning; epidemiology; the medical care system; and use of community health services. Students read the specific objectives of each unit and take a diagnostic pretest. They are then referred to textbook and supplementary reading assignments for items missed. They check their mastery of stated objectives with posttests. Students must take three end-of-the-unit exams. Hard copies of the learning package, with or without the textbook and including the final examinations, are available from the Institute for Personal and Career Development. (Author/RM)

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COMMUNITY HEALTH

Course Administrator Manual

SD009502

COMMUNITY HEALTH
COURSE ADMINISTRATOR MANUAL

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PREFACE

As a tutor/grader in this course your role is different from that of a conventional college instructor. Self-instructional materials have already been developed and tested, so that most, if not all, students will succeed in mastering the course content if the materials are used as intended. There should be very little conventional teaching required.

This manual is provided so that you will be familiar with your responsibilities as Course tutor/grader. If you have not already done so, read it in its entirety. Questions beyond the scope of this manual should be referred to the manager for the Individualized Degree Program.

THE TUTOR/GRADER: ROLES, TASKS AND FUNCTIONS

The tutor/graders assist the student in the proper use of materials to assure successful completion of the course, grade exams, and determine final grade. To do this, the tutor/graders must be familiar with the materials, the format, the learning sequence and all of the options available to students for attaining performance objectives for each unit.

The tutor/graders may not change the course in any manner. The course content, instructional sequence, instructional strategies and evaluation instruments will be changed only through the systematic processes of instructional development under the supervision of professional developers. Because of the objective nature of learning criteria for this course, the tutor/grader has almost no interpretative role to perform. He should return, by hand, to the Individualized Degree Program secretary the graded exam within 48 hours of its receipt by him. The evaluation should clearly indicate any deficiencies with instructions as to how they can be overcome.

TUTOR/GRADER/STUDENT CONTACTS

Each student receives all materials necessary for the course in one package. The tutor should provide the Individualized Degree Program with a letter directed to the student introducing him/herself and explaining his/her function and the times and place the student may call him/her if assistance is needed. If the students understand the proper use of course materials, the tutor/graders may never again hear directly from them and only indirectly in the form of their examination results. If students continue to progress successfully through the course, the tutor/graders will interface indirectly with them a minimum of three times to grade the exams and formulate a review of the students' performance on the exams.

Tutor-student contacts should be recorded and the problem explained for evaluation purposes. The tutors should submit explanations of instructional ineffectiveness to the Institute for Personal and Career Development as explained under Evaluation Procedures and Materials. Eventually, when the course has been revised to satisfy learner needs, the tutor-student contacts should be minimal.

ROLES AND TASKS

The tasks of the tutor/grader are as follows:

1. To facilitate a student's success in this course
2. To monitor a student's progress
3. To provide individualized aid to students who require it
4. To report contacts with students
5. To submit grades for a student who has completed the course

As tutor/grader, you are not responsible for primary instruction. The course materials themselves have been designed to serve in that capacity. However, it may be necessary from time to time to provide specific remedial instruction to those students who are experiencing difficulty. You should record all requests for assistance from students on special forms provided with this manual.

You are not responsible for administering or grading examinations. The objective nature of the learning criteria for this course makes it possible for Institute personnel or persons designated by the Institute to perform these tasks. You will be able to monitor student progress by keeping track of the grades sent to you by the Institute. After you have received the last exam grade for a student, you will be responsible for submitting a final grade to the Institute.

The tutor/grader is permitted to do whatever is necessary to assist the student except change the credit exams or the conditions under which the exams are administered. If you have any questions about tests or test results, contact the Examination Coordinator or the Academic Administrator at the Institute.

MATERIALS USED BY STUDENTS

INSTRUCTIONAL MATERIALS

Four types of instructional materials are provided for students in this course.

Student Manual

The Student Manual contains, in one document, all the administrative information about the course. It contains information on the scope and sequence of the course, how to use the Unit Study Guides, examination procedures, and grading, time limits for completing the course and how to get assistance.

Unit Study Guides

This book contains an introduction, a goal and objectives, study suggestions, and reading assignments for each unit. It also contains self-diagnostic tests for the student to use to check his knowledge of the material in each unit. A detailed description of how to use the Unit Study Guides is provided in the Instructional Strategies section of the Student Manual.

Textbook

Henkel, Barbara. Community Health. Boston: Allyn and Bacon, 1970.

Supplemental Readings

This book contains supplemental readings of two types: journal reprints and articles written by the author of the course to cover material not included in the textbook.

ADDITIONAL MATERIALS

In addition to the instructional materials for the course, each student receives a packet marked "Additional Materials" containing the following items.

Cover Letter

The cover letter explains the use of each of the items included in the packet of Additional Materials.

Package Inventory

This inventory lists all items that are a part of the Community Health package. It is provided for the student to use to be sure that nothing is missing from the package he receives.

Student Progress Chart

This checklist serves as an indicator of the student's progress throughout the course. Spaces are provided for the student to check off each unit as he completes work on it. It is not an assignment.

Course Evaluation Opinionnaire

This Opinionnaire provides the opportunity for the student to record his personal reaction to the course. It should be completed and returned to the Institute after a student takes the last Credit Exam.

If you have not already done so, stop now and familiarize yourself with the package of materials provided to students.

POSSIBLE PROBLEM AREAS

Experience has shown that occasionally students do have difficulty with courses of this type. It is to your advantage to know what types of problems to anticipate.

1. Students may fail to read the Student Manual prior to starting work on the Unit Study Guides. The Student Manual tells students how the course works and what they are expected to do. Be sure to ask students who may have difficulty to read it completely and carefully if they have not done so.
2. Students may sometimes fail to understand the Study Map which outlines the instructional procedures. If you receive phone calls about this problem you should ask the students to look at their maps while you direct them through the process and explain each step.
3. Some students may be confused by the different types of objectives they are required to attain. Some objectives require students to simply memorize material so that they can recall it or recognize it on a test. Other objectives call for understanding a concept well enough to apply it in different situations. A student may memorize a sample on the Diagnostic Post-Test and then find that a different situation is used on the Credit Exam. If a student is experiencing difficulty because of this, call his attention to the Study Suggestions portion of the Unit Study Guides which distinguishes between the objectives which are conceptual and those which require recall or recognition.
4. Students who are not familiar with performance objectives may not realize their usefulness in pinpointing the material to be studied. After they have taken Credit Exam 1, they should realize the importance of the objectives in specifying areas of emphasis for study.

5. Students may be uncertain about scoring the self-diagnostic tests. You may need to point out that to pass a test they must answer all questions correctly, with the exception of the questions for which a specified number of errors is allowed.

EVALUATION PROCEDURES AND MATERIALS

Students must pass three unit examinations. No final examination is required other than the Unit III examination. No student will be allowed to take a unit examination until he/she has successfully passed all exams for previous units. They should be encouraged to attain well above 80% on all examinations before continuing to the next unit of study, and required to achieve at least 80%.

Examinations A and B for each unit and the Keys for each examination are in the sealed envelope accompanying the Course Administrator Manual. Both examinations for each unit cover every unit objective at the same depth, so either may be used in evaluating student learning progress. When a unit exam must be administered more than once to the same student, the proctors will insure that the student writes the alternate test for the second try. Test items from the Self-Diagnostic exam, and exams A and B may be interchanged to compile additional unit examinations if the need arises. Whenever a student fails a formal unit exam, the tutor should admonish that student about failure to use the materials as they are designed and, especially, misuse of the Self-Diagnostic Examinations.

Tutors are responsible for strict security of examinations so evaluation results are true indicators of learning effectiveness. Reports of examination results by unit should be made to the Institute for Personal and Career Development with comments concerning difficulties encountered by the learner.

There are three Credit Exams for this course. No other exams are required. Since students work at their own rate, there are no specified times at which exams must be taken. Students are expected to assess their own "readiness" to take a Credit Exam by taking the self-diagnostic tests. The exams and the units they cover are as follows:

- Credit Exam 1 -- Units One through Four
- Credit Exam 2 -- Units Five through Seven
- Credit Exam 3 -- Units Eight through Ten

The Institute will notify the student of his grade. A copy of the graded exam will be sent to you so that you can stay informed about a student's progress and so that you can refer to it if the student contacts you for aid in the course. Students will not be sent a copy of the graded exam since the exams must remain confidential.

If a student does poorly on an exam and wishes to take the exam again, he may do so at your discretion.

SCHEDULES AND SCHEDULING

The course can be completed in the time ordinarily devoted to a three semester hour university course. The student contracts the starting date and exam dates. If the student cannot meet an exam date, he/she should contact the proctor and reschedule the exam. Under no circumstances should a student take an exam for which he/she is not fully prepared.

The suggested time schedule for the learning package is as follows:

<u>UNIT</u>	<u>TIME SCHEDULE (WEEKS)</u>
I-IV -----	3
V-VII -----	3
VIII-X -----	<u>3</u>

Total Weeks 9

Once a student receives his package of course materials he may start work on the course at any time convenient for him. It is recommended that the course be completed in twelve weeks (the time ordinarily devoted to a three credit-hour university course). Any student who wishes to complete the course in less time is encouraged to do so. There is no minimum time period.

If all work for the course is not completed in twenty-four weeks, the student will receive an incomplete grade. This incomplete can be made up by completing all the course requirements. However, if a student does not complete the course within a twelve month period and wishes to continue, he will be required to register again for the course.

ADMINISTRATIVE RECORDS

As tutor/grader you will be responsible for keeping the following records.

Student Contacts Log

Forms for recording all students contacts have been provided for your use in a separate section of this manual. These forms contain space for recording a student's name, the date, the method of contact, the substance of the communication and any remarks you may wish to add. A separate log sheet should be used for each student. These log sheets should be submitted to the Individualized Degree Program Manager at the completion of the course by a student.

Final Grade Report

When you have received the grade for the third Credit Exam for a student you should compute his final grade by adding the raw scores of all three exams and deriving the average score. Letter grades should correspond to the following grade scale:

90% to 100%	= A
80% to 89%	= B
70% to 79%	= C
60% to 69%	= D
59% or lower	= E

This manual contains forms for you to use in computing and reporting final grades. These should be sent to the Individualized Degree Program Manager at the Institute as soon as possible after you have received the third Credit Exam score.

If you need additional copies of the Student Contacts Log or the Final Grade Report, contact the Individualized Degree Program Manager.

A PHILOSOPHY OF NON-TRADITIONAL EDUCATION

The concept that learning is life-long and need not take place solely in a classroom is basic to the philosophy of non-traditional education. Non-traditional education is essentially an attitude which puts the student first and the institution second. The Institute was founded on the premise that there should be continued experimentation with forms of non-traditional study which minimize the traditional rigidities of campus life: time, space and systems of academic accounting.

The Institute and University as a whole recognize a need for an individualized external degree program--one which can serve the housewife and mother, the person with a full-time job and uncompleted degree, the serviceman who cannot be sure of a residency of sufficient duration to finish a degree, as well as all those individuals already being served by virtue of association with some group. Such a degree, hopefully, would not only solve the problem of the student's isolation and limited (or excessive) mobility, but would also be truly individualized, that is, capable of being shaped to the needs of each individual rather than requiring the individual to adjust himself to a preset degree structure.

The Institute and the University feel the urgent need to integrate the traditional and non-traditional approaches to "open learning" into a functional relationship, productive for all philosophies of learning. It is the Institute's goal to not only increase the interests and commitment of many would-be-learners with respect to all modes of education, but also to encourage the atmosphere necessary for continued experimentation in order to produce significant benefits for everyone involved in higher education.

COMMUNITY HEALTH

Supplemental Readings

Charles E. Reed, M.P.H., Ph.D.

**INSTITUTE FOR PERSONAL AND CAREER DEVELOPMENT
CENTRAL MICHIGAN UNIVERSITY**

COMMUNITY HEALTH
SUPPLEMENTAL READINGS

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MAJOR HEALTH PROBLEMS IN THE UNITED STATES

- 1 Disability resulting from chronic diseases, whether temporary or permanent, can be very disruptive and costly. The cost of medical care as well as loss of manhours of productive work can be financially devastating to families and industries. Below is a list of the major causes of disabilities resulting in time lost from work in the order of frequency and duration.

1. Heart conditions
2. Arthritis and rheumatism
3. Visual impairments
4. Paralysis, complete or partial
5. Mental and nervous conditions
6. Impairments of back or spine
7. Hypertension without heart involvement
8. Asthma - hay fever

- 2 Man has been able to conquer many of the communicable diseases that have plagued him through the centuries with immunizations. However, there are still many diseases for which we have no immunizations. Man must find other ways for controlling those for which there are no immunizations. Below are two lists of communicable diseases: (1) a list of diseases for which we have immunizations and (2) a list of those for which we do not have immunizations.

Immunizations

Diphtheria
Tetanus
Influenza
Smallpox
Measles
Poliomyelitis
Mumps
Typhoid fever
Pertussis
(whooping cough)

No Immunizations

Meningitis
Pneumococcal pneumonia
Streptococcal infections
Chicken pox
Viral hepatitis
Venereal disease
Impetigo
Malaria
Ringworm
Bacillary dysentery
Leprosy
Histoplasmosis
(fungus in the lungs)

- 3 Man can delay the onset of many of the chronic diseases by practicing good health habits. Exercise, such as walking, jogging, swimming, etc., not only improves muscle tone, but helps organs to function properly and retards the development of such chronic conditions as diabetes and heart disease. People who develop interesting hobbies early and maintain an interest in them throughout their lifetime seem to be able to handle leisure time more effectively, and maintain a good mental outlook, avoiding depression later in life.
- 4 Plenty of rest, relaxation, and sleep have proved to be very effective in maintaining a well-functioning heart, making people less accident-prone, and delaying the onset of arthritis.
- 5 A well-balanced diet provides healthy tissue in all parts of the body and is particularly important for maintaining healthy cardiovascular systems, teeth, bones and joints, and mental health.
- 6 In recent years, smoking cigarettes has been associated with heart disease, cancer, and chronic obstructive pulmonary disease. Smoking is considered detrimental to good health.
- 7 Periodic physical examinations will often result in the early detection of chronic conditions and thus help to delay much of the disability that often accompanies them.
- 8 People who develop and practice good safety habits are able to avoid bodily damage from all forms of accidents.

ADVANTAGES AND DISADVANTAGES OF FEDERAL FUNDING

- 1 The philosophy that everyone has a right to good health has gained wide acceptance in our country. The federal government is becoming more and more involved in establishing health facilities and rendering health services. In the vast majority of cases, this is done by making funds available on a matching basis to the fifty states. Wealthier communities, however, seem to get most of these funds because they are better able to provide matching funds. Some grants are based on population, and the more densely populated areas of the country benefit most from these.
- 2 Federal funding generally results in more and better health services for all population groups. It is a well-known fact that more money can improve the coordination of health programs, and the availability of federal funds does aid in providing better trained health personnel and more uniform programs throughout the country. Inherent in federal programming is greater opportunity and security.
- 3 It is becoming evident, however, that there are disadvantages as well as advantages connected with federal funding for community health programs. With federal funds comes more federal control and much less freedom at the state and local levels. Federal funding can also result in a loss of initiative and sense of responsibility at the local level. Because funds may be stipulated for only a specific project, they sometimes tend to produce programs that are out of balance in some parts of the country. Lastly, one of the great disadvantages from the standpoint of the local community is the amount of paper work that is involved in securing and using federal funds.

HEALTH EDUCATION

- 1 The goal of health education is to close the gap between scientific medical knowledge and the health practices of the population. The primary purpose of all health education is to get people to accept responsibility for their own health. Health education may take place in any setting, but most of it takes place in the home or in the school. Individuals are exposed to a very limited amount of health information in other situations.
- 2 Health education attempts to get people to accept the responsibility for their own health by: (1) making health a value in life, (2) by teaching them to carry out activities individually and in groups which will help them to realize good health, and (3) by promoting the development of health facilities and services and informing the public how and when to use them.

DEMOGRAPHIC DATA AND VITAL EVENTS

- 1 Demographic data describes the population and is collected by the Bureau of Census every ten years. The taking of the census is the responsibility of the Secretary of Commerce. The Bureau of Census is a division of the Commerce Department, which is a federal agency. The Bureau of Census counts every man, woman, and child in the United States. The age, sex, race, and marital status of each individual is recorded, and data are obtained about the number and makeup of households. Additional information, such as condition of housing, income, education, occupation, distance traveled to and from work, and the length of stay in present residence, is acquired from representative samples of the population. Although the federal government is responsible for taking and storing census data, this responsibility is delegated to the states and information is stored at county, state, and federal levels.
- 2 Information on vital events is taken from official registration records of births, deaths, marriages, and divorces. Vital statistics are the responsibility of the state, but they are collected and stored by the health departments at the county level. They are also compiled at the state level and stored in the state boards of health.
- 3 In order to make demographic data, or population characteristics, comprehensible, they are usually expressed in statistical terms such as averages, frequency distributions, percentages, or ratios. Some examples are listed below:
 - (1) Age distribution, which refers to the number of people in a specific age group.
 - (2) The sex ratio, which refers to the number of men per hundred women.
 - (3) The dependency ratio, which refers to the number of persons less than fifteen years of age and the number of persons sixty-five years of age and over, divided by the number of persons in the fifteen through sixty-four year-old age group. The ratio multiplied by the constant 100 estimates

the number of dependent persons for every hundred persons in the active population.

- (4) The child-woman ratio, which refers to the number of children five years of age and under per one hundred women of child-bearing age.
- 4 Morbidity refers to illness. The two statistical procedures which help to make morbidity data more meaningful are listed below:
 - (1) The incidence rate, which refers to the number of new cases that occurred during a given time period divided by the number of persons
 - (2) The prevalence rate, which refers to all cases at a particular time divided by the number of persons living in an area
- 5 Most vital statistics relate the total number of vital events which occur over a period of time (usually one calendar year) to the size of the population affected. Such terms as the infant mortality rate (the number of deaths of infants one year of age or less divided by the number of births), the crude birth rate (the number of births occurring during one calendar year divided by mid-year population), and the crude death rate (the number of deaths in one calendar year divided by the mid-year population), are all statistical terms which describe vital events.
- 6 The National Center for Health Statistics, which is a part of the federal Public Health Service, devotes all its time to compiling and analyzing health statistics in an effort to provide current and comprehensive statistics on a wide range of health areas. The primary purposes of health statistics are (1) to provide a comprehensive picture of the nature and magnitude of the nation's health problems; (2) to assess how well health services are meeting these problems, at what cost, and with what gain; and (3) to serve basic health research needs.

The following report represents the summary and conclusions of the Report of the Committee to Evaluate the National Center for Health Statistics, as submitted to the Health Services and Mental Health Administration, Department of Health, Education, and Welfare, September, 1972. The committee was assisted by Moshman Associates, Inc., Bethesda, Md. in carrying out the investigative work and preparing the report.

Health Statistics Today and Tomorrow

The Report of the Committee to Evaluate the National Center for Health Statistics

FOREWORD

This Report sets forth the major findings and recommendations of the Committee to Evaluate the National Center for Health Statistics. It presents the Committee's view of today's health statistics and tomorrow's needs, and uses this frame of reference as a basis for its recommendations.

Supplementing the Report is a series of 19 Special Reports which are specific to some aspect of health statistics and activities of the Center, and which detail or support many of the findings and recommendations here presented.

Prepared as subcommittee or staff documents, not all of these Special Reports have been reviewed by all members of the Committee. Therefore they should not be construed as having full Committee endorsement.

For working purposes the Committee established five subcommittees: Vital Statistics and Health Status, Health Resources and Services, Statistical Methodology, Federal-State-Local Systems, and User Inquiry and International Activities. Most of the Committee members served on two of these subcommittees; members of the staff were assigned to each with a different key individual for each subcommittee. These subcommittees were responsible for detailed reports of major program aspects and prepared recommendations which were presented to the entire Committee. The titles of the detailed reports are listed at the end of this document.

Special mention should be made of the undertakings of the subcommittee on the User Inquiry. This subcommittee developed a listing of users of National Center for Health Statistics material including governmental, university, industrial and other groups. In response to an invitation to comment on the NCHS programs, a great volume of valuable information was received from these users. This material was drawn upon in many of the subcommittee reports on particular program components. The Committee wishes to make special note of its gratitude to these contributors.

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I. INTRODUCTION: A NEW LOOK AT OLD PROBLEMS

*Upon this gifted age, in its dark hour,
Rains from the sky a meteoric shower
Of Facts . . . they lie unquestioned, uncombined.
Wisdom enough to leech us of our ill
Is daily spun, but there exists no loom
To weave it into fabric; . . .*

"Huntsman, What Quarry?"
Edna St. Vincent Millay

Miss Millay's verse expresses eloquently the more prosaic complaint of health administrators that they have a superfluity of statistics but little information.

The primary role of health statistics in the United States should be

1. to provide a comprehensive picture of the nature and magnitude of the Nation's health problems;
2. to assess how well health services are meeting these problems, at what cost, and with what gain; and
3. to serve basic health research needs.

An effective system of health statistics must, then, provide those responsible for health services with necessary information to help understand the situation, identify problems, set priorities, define policy, plan programs, manage services efficiently, and evaluate effectiveness.

These objectives require a mutually enhancing or symbiotic relationship among the various parts of the health statistics system. The statistical system must serve the common needs of the users as well as the unique requirements of policymaking, planning, managing, evaluating, teaching, and research. The system, while maintaining continuity, must be sensitive to changing policies and priorities. It must be comprehensive. It must be timely. It must provide interpretations of the statistics in terms relevant to

policy questions. It must also include the wide dissemination of information to the scientific community, the decision-makers and to the population as a whole.

The charge to the Committee to Evaluate the National Center for Health Statistics was to assess the activities and functions of the NCHS within the broad framework of the role of health statistics. This need for a comprehensive statistical basis for dealing with the health needs of the Nation was emphasized in the initial briefing of the Committee by Dr. Vernon E. Wilson. He not only stressed the broad social purpose to be served by the NCHS, but also underscored the importance of forging a proper linkage between the Center and other statistical activities of HSMHA and other agencies concerned with health-related matters.

The stated mission of the NCHS is

... to develop and maintain systems capable of providing reliable, general purpose national descriptive health statistics on a continuous basis and to publish these statistics for ... widespread use. . .

This statement emphasizes the general purpose nature of the activities of the NCHS. The Committee agrees completely with the need for such general purpose data. In the context of the essential broad social scope of health statistics; however, one must relate the general purpose character of the NCHS activities to program policy needs.

Programmatic data yield information only about those who are served by the program. From the social policy point of view, it is important to know how those who are served by the program differ from those who are eligible but do not receive services, or from the general population. Data on the latter group are obtained through the general purpose statistical agency.

A need exists for continuing discussion and coordination between the general purpose and programmatic statistical units. To provide a mutually beneficial relationship requires a continuous communication channel. An administrative mechanism is needed to foster this communication so that identification of problems, classifications and definitions of data elements, and general methods of data collection can be agreed upon jointly.

As the President's Commission on Federal Statistics suggested (Vol. 1, chapter 3, pages 109-111), when new statistical series are generated in response to each newly perceived "need," substantial expenditures of resources can result without commensurate return. The Committee proposes the development of a system of health accounts as a framework which can serve as a guide to help determine which statistics are most urgently needed. Such a framework would systematically relate the inputs of services, manpower, facilities, and expenditures to output measures of health status such as rates of mortality, morbidity, and disability. Chapter III of this Report sets forth the concept of such a framework in more detail. Unless some such system is developed, there exists a continued danger of generating statistics that are of less than optimum usefulness.

An important consideration in the collection, processing, analysis, and use of health-related statistics is that of the relationship among the participants of the emerging Cooperative Federal-State-Local Health Statistics System being implemented by the NCHS. The Committee has reviewed the development of this cooperative concept and offers several recommendations directed towards expanding the support and scope of this system, thereby maximizing the results to be realized by all partners of this system.

In keeping with the Committee's charter, this Report begins with a review of the current status of health statistics and the problems existing today. It continues with the future needs in health statistics. Forecasting the shape of things to come, the Committee's recommendations are presented in Chapter IV. Certain general recommendations are followed by technical recommendations, more specific in nature. The latter are grouped in four broad categories: Program Development, Methodology, Management and Operations, and Publications and Other Data Access.

In assessing the Committee's recommendations, there should be a recognition of the large and increasing expenditure on health care in this country, now running at an annual rate of more than \$80 billion. All evidence coming before the Committee indicates that the level of financial support for the statistical intelligence for such a large investment in the health services system is not commensurate with the investment itself. The Committee's recommendations have substantial implications for future requirements for increased money and manpower in the development of a comprehensive, flexible, and useful health statistics system.

II. HEALTH STATISTICS TODAY

What does this Nation know today about the health of its population, and from where does this knowledge come? We know most—and have known for the longest time—about death. Since 1933, all States have comprised a death reporting area. So our first comprehensive health status data came from knowledge of the ages at which people died and causes of death.

Through the death reporting program we have followed the decline in communicable disease and the rise in chronic diseases. The birth and death reporting systems have provided vital data, and a number of important indices of health status. In providing guides to the changing pattern of diseases of public health importance, these systems have had great influence on decisions relating to new directions in medical care and in research.

Death, birth, marriage, and divorce statistics constitute the Vital Statistics Program of the National Center for Health Statistics. These, together with the decennial population enumeration conducted by the Bureau of the Census, and immigration and emigration data, provide the basis of knowledge of the size, distribution, characteristics, and growth of our national population.

But essential as are these data, they do not give information about the health of people throughout their lives—information needed to indicate medical care needs, to determine causes of disability, and to provide a picture of the health status of the American people. Ambitious attempts at such measurements were first made by the Public Health Service in the early 1920's in Hagerstown, Maryland, and again by the Public Health Service's first National Health Survey in 1935, made with WPA funding. The National Opinion Research Center began in 1953 a series of periodic surveys on the use of and expenditures for medical care. The passage of the National Health Survey Act of 1956 made it possible to undertake a continuing national health survey using a probability sample of the entire population of the United States. This mechanism has produced first the Health Interview Survey and then the Health Examination Survey. It has enabled the development of a unique body of knowledge about the health of our population. Further, these surveys have provided a wealth of information about the utilization of and expenditures for health services. The NCHS has also undertaken record surveys which add further dimensions to knowledge of health status.

These national general purpose health statistics are complemented by many programs, public and private, which gather and publish data about sub-groups of the population. The latter data are primarily for health program purposes, such as the control of a particular disease or the beneficiaries of a particular health service program.

Health statistics today encompass health service resources as well as health status and health care utilization. For many years professional organizations were the sole collectors of such data, and today they will maintain primary responsibility. But with the growing need for comprehensive data and the increasing role of the Federal government in the financing of health facilities and services and the education and training of health manpower, the NCHS has assumed greater responsibility in the area of health resources statistics. Today publications of the NCHS, based on data from many sources, bring together the widest available range of data on health manpower and facilities.

Health statistics today were considered by the Committee in five major categories: population, health status, health manpower, health care facilities, and health services utilization and financing.

Population

Information about the size, composition, and growth of the population of the United States comes mainly from two sources, the Bureau of the Census and the NCHS.

The decennial census has for almost 200 years provided counts of the population, together with enumeration of a wide variety of demographic characteristics, thus providing basis descriptions of the population of the United States. These censuses are now supplemented by the Census Bureau's Current Population Surveys.

These data are complemented by the Vital Statistics Program of the NCHS, which has three major components: natality statistics, mortality statistics, and marriage and divorce statistics. These provide the information about the dynamics of population, its growth and changes in its composition. They furnish the information, basic to making population projections, for fertility analysis, for mortality analysis, for

the appraisal of health status, for planning needed health services, for projecting school needs, and for other purposes. They are essential materials in the teaching of demography, sociology, medicine, and public health. In addition, these data are inputs to industrial marketing analysis, actuarial investigations, and insurance financing generally.

These reporting programs are based on legal documents: birth, death, marriage, and divorce records. All States, and other reporting jurisdictions belong to the birth and death reporting areas, which have a very high degree of completeness of reporting. Marriage statistics, however, are reported by only 41 States and Washington, D.C., and divorce statistics by only 29 with summaries from the remaining jurisdictions.

Birth and death records and derived statistics include a wide array of data. The standard birth certificate includes a number of items about the child, his parents and the receipt of health services. The death certificate similarly includes considerable detail about the deceased and the cause of death. Data from these legal records are supplemented from time to time by follow-back studies of births and deaths.

The NCHS presents vital statistics in a variety of publications. The first published national data, *Monthly Vital Statistics Reports—Provisional Statistics, Births, Marriages, Divorces and Deaths*, appear within two months after the close of the reporting period. Final figures are published some two years after the end of the reporting year, with a narrow range of tabulations. The definitive volumes, *Vital Statistics of the United States*, appearing some three years after the close of the reporting period, contain a very wide range of data.

In general, except for the important matter of timeliness, these reports do an excellent job of meeting the demands of users, within the limits of available data.

Health Status

The most important sources of information on health status of the population of the United States are two major activities of the NCHS: The Health Interview Survey (HIS) and the Health Examination Survey (HES). Complementary data come from the NCHS Hospital Discharge Survey (HDS). Birth and death reports, as have been noted, also contribute to knowledge of health status.

The Health Interview Survey is a household survey designed to obtain, on a continuing basis, information on acute and chronic illness, impairments, injuries, disability, utilization of health services, and related topics. The survey uses a stratified, probability sample, with interviews each year of some 42,000 households, providing data on about 134,000 persons. Findings of these surveys, which have been conducted since 1957, have been published in a large number of reports. These include the annual *Current Estimates from the Health Interview Survey* published soon after the end of each survey year, as well as annual reports of acute conditions and associated disability, chronic conditions, disability and injuries, and hospitalizations. Less frequent reports deal with physician and dental visits, use of other health services, and personal health expenditures and insurance.

The Health Examination Surveys are studies of the health of the population using direct physical examinations, clinical and laboratory tests, and other measurements. This survey provides the best data obtainable about the physical and physiological characteristics of the American people and about such health characteristics as the prevalence of certain chronic diseases. Three survey cycles have been completed. They have covered (1) the adult population (1959-62), (2) children, ages 6-11 (1963-65), and (3) youths, ages 12-17 (1966-70). The Health and Nutrition Examination Survey (HANES), the cycle now in progress, covers the population 1-74 years of age, and gives special emphasis to unmet health needs and nutritional status.

Each of these cycles has utilized a probability sample. For the first three, the samples included 6,000 to 8,000 persons; in the current cycle, it is planned to examine some 30,000 individuals.

The schedule of publications based on data from the first cycle is essentially completed. For the second, the first few reports have been published, and for the third, none. As with the HIS, each publication is directed to a fairly narrow sector of survey findings; there are no reports dealing with findings in a comprehensive manner.

The Hospital Discharge Survey provides data on characteristics of patient utilization of hospitals. The survey has been taken continuously beginning in 1964. While the HIS and HES draw from the universe of the civilian, non-institutionalized population, the HDS draws from the universe of patients discharged from short-stay hospitals, including those who die in the hospital. The sample institutions

include some 700 of the 7,000 hospitals in the Master Facility Inventory; of these, patient records of 395 hospitals have been included in the survey.

Health Manpower

The primary sources of health manpower data today are professional organizations. These, in a variety of ways and at varying levels, assemble and publish data on licensed members of their professions or on professional organization membership. These efforts may be supported entirely by the professional organization itself, as is the case with the listings and publications of the American Medical Association; they may be assisted by the NIH Bureau of Health Manpower Education, as are the American Dental Association and the American Nurses Association; or may be supported by the NCHS, as have been recent collections of data on pharmacists, opticians, and optometrists. A number of other agencies supply complementary information as, for example, the Council on Foreign Medical Graduates and the U.S. Immigration and Naturalization Service, which give information on the international movement of health workers, and the Internal Revenue Service which makes available certain data on professionals' income.

These undertakings supply totals for individual professions. The one source for overall data is the Bureau of the Census which provides decennial counts of workers in health occupations and in the health services industry. The usefulness of Census data, however, is limited because (1) occupations are recorded as reported by the person enumerated, resulting in totals and distributions often quite different from those reported by the professions, and (2) these data are not available on a current basis.

For reference purposes today, the most important comprehensive sources of health manpower data are the NCHS annual *Health Resource Statistics* and its companion, *Health Manpower: A County and Metropolitan Area Data Book*, and the *Health Manpower Source Book* series and related publications of the NIH Bureau of Health Manpower Education.

Health Care Facilities

The most comprehensive listing of health care facilities is the Master Facility Inventory (MFI) of the NCHS. This listing, which was compiled as a sampling frame for such studies as the Hospital Discharge Survey and the Nursing Home Survey, includes the names and addresses of all known inpatient health facilities in the United States.

With data from the MFI and the studies which it has made possible, the NCHS has published information on institutional distribution and characteristics in *Hospitals—A County and Metropolitan Area Data Book*, *Nursing Homes—A County and Metropolitan Area Data Book*, and in the annual *Health Resource Statistics*.

The Health Care Facilities Service of HSMHA compiles and publishes data on the supply of and need for health care facilities, a responsibility growing out of the construction funding authority originally granted to the Public Health Service under the Hill-Burton Act of 1946. Statistics on the volume, status, and costs of construction under this authority are provided by the Facilities Engineering and Construction Agency of HSMHA.

Data on facilities for a variety of categorical programs are compiled and published by the Maternal and Child Health Service, the National Institute of Mental Health, the Center for Disease Control, and the Community Health Services, all in HSMHA, and by the National Cancer Institute of NIH. Data of facilities participating in the Medicare program are assembled and published by the Social Security Administration. The Department of Defense, the Veterans Administration, and DHEW publish reports on clinical facilities under their jurisdictions.

The annual survey of the American Hospital Association, published in August of each year in *Hospitals*, is unique in that it provides a complete listing of registered hospitals, together with patient load data for each institution.

Health Services Utilization and Financing

The Health Interview Survey, since 1959, has regularly collected and published data on the use of hospitals, physicians, and dental services, by geographic area, age, sex, income and other demographic factors. This survey has also collected, at less frequent intervals, data on individual and family expenditures for health services.

Other survey mechanisms of the NCHS that yield data on health care financing and the use of

health services include the Hospital Discharge Survey, the Nursing Home Survey, the planned Ambulatory Care Survey, and the National Reporting System for Family Planning Services.

Many other agencies have responsibilities for assembling data in this field. HSMHA's National Center for Health Services Research and Development, concerned with the improvement of the quality and availability of health services, has undertaken a variety of utilization studies, directly or under grant. The Social Security Administration has a broad mandate with respect to the operation of the Medicare Program, while the Social and Rehabilitation Service is responsible for Medicaid.

Those Federal agencies which provide direct medical care, the Department of Defense, the Veterans Administration, and several HSMHA components, provide utilization data for the populations they serve.

Important information on costs of health services comes from publications of a number of Federal agencies, among them the *Monthly Consumer Price Index* from the Bureau of Labor Statistics, *Statistics of Income* from the Internal Revenue Service and *Government Finances* and the *Survey of Current Business* from the Bureau of the Census.

Information on hospital utilization is assembled and published by the American Hospital Association in a survey now financed largely by the NCHS, the Commission on Professional and Hospital Activities, and the Blue Cross and other insurance carriers.

Today's Problems

In all of these fields the NCHS has made unique contributions. Its statistical designs and the conduct of its major surveys have been exemplary models. It has done a generally excellent job of meeting the demands of its users within the limits of available data, but a number of problems still exist. These are urgent, and they should be noted before consideration is given to tomorrow's needs. These problems can be grouped under seven major subjects: (1) timeliness of publication, (2) analysis of data collected, (3) quality of data, (4) standardization of records and definitions, (5) development of comprehensive reports which bring together material gathered through the several and complementary data gathering programs, (6) indexing of available publications and unpublished data, and (7) accessibility of basic data in computer-readable format.

Timeliness

Among the complaints of the users of the NCHS data, that of the delays in publication is overriding. Users of vital statistics data and data from the HIS, HES, and HDS all cite lack of timeliness as an urgent problem. The usefulness of reports from the data systems is greatly enhanced as the timeliness is increased. A complex and rapidly changing society cannot afford the luxury of long gaps between collection and release of health data.

Analysis

The quality of the analytical studies published by the NCHS in the fields of vital statistics and health statistics has been consistently high and has been praised by a wide range of users. But many areas have received too little analytical attention. Important among the current analytical needs are trend analysis, socio-economic analysis of demographic and health status data relating to the utilization and financing of health services, linkages of HIS and HES findings, linking of birth and infant mortality records, and patterns of marriage and divorce.

Analyses in these areas are needed for a variety of reasons. Trend analysis, for instance, helps to assess progress and establish priorities. The socio-economic analyses which have so far been undertaken strongly indicate that future gains in the health of the population are at least as likely to come from improvements in socio-economic status as from bio-medical advances. Changing value systems are reflected in marriage and divorce patterns which have great implications for future population growth and its economic consequences.

Quality of Data

The President's Commission on Federal Statistics has stated that improvement of the quality of Federal statistics in the decade ahead is "... the single most urgent need facing the federal statistical system."

NCHS has made and continues to make commendable efforts to maintain and improve the quality of its own major statistical series. But problems still exist. Among problems of current concern are the quality of cause of death data reported on certificates and the effect of obtaining data from proxy respondents in HIS. Inadequate attention has been given to the quality of data obtained and compiled from other sources, especially in the health manpower and facilities areas.

Standardization of Records and Definitions

In the vital records field, lack of uniformity of content of birth, marriage, and divorce records makes it impossible to secure national data on some items of importance. In the areas of health manpower, facilities, utilization and financing, the lack of consistent terminology and definitions greatly limits the usefulness of collected data.

There is often great difficulty in comparing various programs because units of measurement are different among and within programs both at the national level and at State and local levels. Such terms as enrollee, registrant, encounter, service, person and patient may be used interchangeably in reports. In these circumstances an administrator has great difficulty in assessing program achievement. The problem arises both in comparing operating program statistics with each other and comparing the accomplishment of a given program with the situation in the country generally. To achieve the necessary agreements on definitions and classifications, there must be close collaboration between those responsible for programmatic statistics and those responsible for general purpose statistics.

Comprehensive Reports

The NCHS produces little in the way of publications which cover a broad range of subjects drawing from the several statistical operations of the Center. With its wealth of material on which to draw, the NCHS has an opportunity to make an unparalleled contribution to a wide audience, including key decision-makers for the health field, by preparing "overview" publications covering the broad aspects of health trends and health service utilization trends.

More Adequate Indexing

The NCHS produces a great volume of valuable data. But it fails in one related job which, if fulfilled, would be of enormous benefit to users and which should ease its own burdens. It is very hard for users to know just what information is available and how to retrieve it. The need here is for:

- a. An index of the content of each series, including forthcoming publications.
- b. Information about the types of unpublished data available, and how to get them.

Machine-Readable Data

It would be most helpful to many users if NCHS would make available basic data files in machine-readable format at the earliest possible date after collection and editing of the data. Availability implies complete documentation of record formats and appropriate publicity as to their availability at a nominal cost. It is suggested that NCHS consider adopting the procedure of the Bureau of the Census in designating private firms which satisfy reasonable criteria as depositories and processors of the tapes. Naturally, the confidentiality of the files must be maintained with respect to individuals and individual families.

Omitted from the foregoing discussion has been reference to needs for types of data not now collected or available. That subject we will now consider in Chapter III, Health Statistics Tomorrow.

VOLUNTARY AGENCIES

- 1 In this country, there are well over one hundred thousand different health and welfare voluntary organizations. These organizations obtain their funds by asking the public to contribute through campaign subscriptions to their programs. They appeal to the public on the basis of the worthiness of their programs. They also collect funds through general donations, endowments, patient fees, membership dues, and grants.
- 2 They are unique in that they have no official status. If people did not support them, they would cease to exist. They use their funds to support demonstration projects, provide direct patient services, sponsor educational programs, help train health personnel, assess community health needs, coordinate voluntary and official agency efforts, give advisory services to official agencies, and support beneficial health legislation. These services reflect the eight basic programs of the voluntary agency. However, not all voluntary agencies divide their time equally among all programs. Some place a great deal of emphasis on just one or two of the program areas. A visiting nurses association, which is almost entirely a service agency rendering nursing services in the home, is an example of such a specialized agency.
- 3 The American Red Cross organization is unique in that it functions both as a voluntary and official agency. It has quasi-official status because it serves as the official disaster relief agency for the nation and as such receives tax funds to carry out its programs. The Red Cross originated during the middle of the last century as a result of a need for organized medical care for soldiers on the battlefield. Clara Barton started the organization for this purpose. It uses a red cross on a white background as its emblem.
- 4 Voluntary agencies are usually placed in one of seven basic classifications. The first of these classifications consists of agencies concerned with a specific disease. Many voluntary agencies fall into this classification. Examples of this type of voluntary agency are the American Social Health Association, American Cancer Society, and the American Diabetes Association.

- 5 The second type of voluntary agency deals with special organs and structures of the body. Examples of this type are The American Heart Association, The American Lung Association, and The National Kidney Foundation.
- 6 The third classification consists of those concerned with the health and welfare of special groups in society. This classification includes such agencies as the Maternity Center Association, The Planned Parenthood Federation of America, and the National Safety Council.
- 7 The fourth classification of voluntary agencies is foundations. Examples of foundations include W. K. Kellogg Foundation, Rockefeller Foundation, Ford Foundation, and the Milbank Memorial Fund.
- 8 The fifth group consists of professional associations such as The American Public Health Association, The American Medical Association, The American Dental Association, and The American Hospital Association.
- 9 The sixth classification of voluntary agencies refers to those which are integrating or coordinating agencies. Examples of this type include The National Health Council, United Health Foundations, comprehensive health planning agencies, and United Fund organizations. These agencies have the objective of getting many mutually different organizations and groups to work together to reach some common health goal.
- 10 The final classification of voluntary agencies includes what are commonly referred to as private, proprietary and non-profit institutions and organizations. Examples are the Kaiser Foundation, Blue Cross Insurance, Blue Shield Insurance, health maintenance organizations, and the National Dairy Council. Their function is to provide services to their members or to potential recipients of the parent organization's goods or services on a non-profit basis.

COMPREHENSIVE HEALTH PLANNING

- 1 Comprehensive health planning agencies at the state, county, or local level are advisory in nature. They have no official status and therefore can only advise official agencies. When no planning is done, then services develop to meet the needs of the most pressing problems or crises. Programs that result from meeting crises have a tendency to continue long after usefulness has diminished. In contrast to this, planning is an organized attempt to choose the best possible course of action to achieve specific goals.
- 2 A comprehensive health planning board should be made up of representatives from various groups in the community if it is to function effectively. Representatives of the power structure of the community should be on health planning councils. These people are in a position to make or block decisions, and their cooperation is very much needed. A second group that should be represented on a planning board is government or political leaders. They can provide funds and therefore their support is important. Another group not to be overlooked is the general public. These people will use the facilities and services and should be able to feel they have had a part in their establishment. Another important group which should have representation on the planning board consists of the health workers in the community. This group of people must execute the plan and their cooperation is mandatory for a successful operation.
- 3 There are four logical steps to be followed in planning for comprehensive health services. The first of these is referred to as fact-finding or diagnosis of the problem. In general, there are three types of data needed. They are: (1) biological information related to illness, disability, and death; (2) sociological facts about the population, health personnel and available resources; and (3) data relative to the environment effecting the health needs of a community.
- 4 The second step is referred to as the plan. This includes: (1) the format of the study; (2) a review of the legislative authority or equivalent for the program; (3) a description of the people being served; (4) a review of the most significant health problems; (5) a description of current health personnel and resources, and programs

being pursued; and (6) a statement of specific health problems and proposed operational programs.

- 5 The next step is implementation: the plan to provide a desired health service is now ready to be carried out.
- 6 The final step in planning, evaluation, should be an integral part of the program. The purposes of evaluation are to measure progress, identify any shortcomings in the plan and the reasons for them, and recommend possible solutions.
- 7 Comprehensive health planning is imperative for providing needed health services for all groups within a society. Planning is slow and tedious work but the ultimate results are effective and long lasting.

EPIDEMIOLOGY

- 1 There are three different kinds of epidemiological studies. Studies of the frequency of occurrence of disease in different populations and in different segments of the same population are referred to as descriptive epidemiology. An epidemiological study that attempts to show a strong statistical association between cause and effect is known as analytic epidemiology. An attempt to determine disease causation through controlled experiments may be referred to as experimental epidemiology.
- 2 In the study of epidemiology as an academic subject, it is necessary for the student to become familiar with several biomedical terms. The first such term is pathogenic agent. This is any agent that causes disease in man. The most typical type of disease-producing agent is bacteria. Symbiosis describes a relationship between a microorganism and man living together in harmony. In other words, neither man nor the microorganism suffers any adverse effects from the relationship.
- 3 Infection occurs when a parasite first invades the host. Whenever a parasite enters a host, it is referred to as infection whether any disease develops or not. Disease, on the other hand, refers to visible interaction between the host and the agent. Unless there are visible symptoms indicating some kind of an interaction taking place between the host and the agent, no disease is present.
- 4 A person who does not develop symptoms or become sick, but who is carrying a parasite, is referred to as a carrier. A classic example of a carrier was Typhoid Mary.
- 5 The matter on which a biological agent depends for survival is referred to as the reservoir. The reservoir for the disease known as anthrax is cows. For many diseases the reservoir is humans.
- 6 A vector is any kind of insect that infects human beings by inoculation, or, in other words, by biting them. A mosquito is the vector for malaria. However, if the insect carries the pathogen on the outside of its body, then it is known as a mechanical transmitter. Flies often serve as mechanical transmitters, carrying

pathogens on their legs and body. If a non-living, or inanimate, object is used to spread a pathogen, it is a fomite. An example of a fomite would be an eating utensil.

- 7 When an individual has some kind of relationship with an infected host, he is referred to as a contact. This simply means that this individual has had some contact with an infected host and therefore could be infected. This is in contrast to a susceptible person or animal who has little resistance to the disease-causing agent. Older people and very young babies are considered susceptibles to respiratory infections.
- 8 There are three basic factors which interact in the development of all disease. Interception of the disease is aimed at one of these three factors. The first factor is the agent or the pathogen. The methods of intercepting microorganisms as the agent are: (1) fumigation, (2) disinfection, and (3) sterilization. If the agent is some form of vector, the methods of interception are: (1) fumigation, (2) prevention of breeding, and (3) sanitary surveillance.
- 9 The second factor that interacts when disease develops is the host. Methods of intercepting the disease process in the host stress increasing the resistance of the host. This may be done by: (1) promoting and maintaining general health and nutrition, (2) giving immunizations, and (3) treatment after the disease develops.
- 10 The third factor that interacts with the agent and the host is the common environment. Methods of intercepting the disease process in the environment include: (1) irradiation of reservoirs, and (2) reduction of the communicability of reservoirs. Reservoirs are reduced in their communicability by (1) isolation of infected host, and (2) quarantine, which means limitation of movement of well people who have been exposed.
- 11 There are approximately five different types of immunity. Active immunity is the result of an infection. However, artificial active immunity is the result of inoculation of antigens. An antigen is any substance that stimulates the production of antibodies in the individual. Natural passive immunity refers to the immunity that a child

receives from his mother. Antibodies pass through the placenta from mother to fetus during interuterine life. The infant also receives antibodies in milk from the mother after birth if it is breast fed.

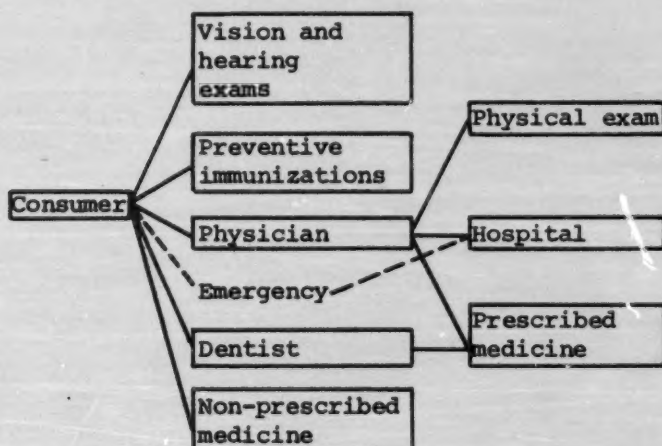
- 12 Whenever we inoculate antibodies into a person, this is referred to as artificial passive immunity. And finally, medical scientists believe that there is what is referred to as inherited immunity. This means that the individual received life-long immunity from the genes at the time of conception.
- 13 Five factors are involved in determining whether disease develops after infection. These five factors include: (1) the resistance of the host, (2) the virulence of agent and the numbers of the agent, (3) the reservoir or source, (4) the mode of transmission; whether by air, water, food, or direct contact, and (5) the portal of entry into the body. In most cases, disease will develop only if the agent entered the body through the appropriate portal of entry.

THE MEDICAL CARE SYSTEM

- 1 The medical care system has three basic resources. They are: (1) biomedical knowledge; (2) facilities and equipment; and (3) health manpower. All medical care is rendered at one of three levels. Those levels are: (1) primary, (2) secondary, and (3) tertiary. The primary level refers to prevention, the secondary level refers to treatment after an individual has become sick, and the tertiary level refers to restoration.
- 2 Today there are several different kinds of privately sponsored health insurance programs available to individuals. They take various organizational approaches to meeting the medical needs of individuals. One such type of health insurance program is referred to as a health maintenance organization. This type of organization has its own physicians and facilities available to members of its group. It is a prepaid independent health insurance program. Another form of health insurance, and probably the best known, is Blue Cross insurance. This is a provider-sponsored hospital insurance program. It was started by the American Hospital Association and it pays for what are called service benefits. These benefits will pay the total cost of hospital care if that is what is written into the policy. However, it must be kept in mind that all policies are different, depending on the amount of the premium. Blue Shield is a provider-sponsored program for physician's care. It is provided by physicians and it also has service benefits. However, physicians do reserve the right to charge more than what the insurance covers.
- 3 There are many commercial health care programs primarily sponsored by insurance companies. These programs pay indemnity benefits. This means that they usually have a fixed dollar amount that they will pay per day while a patient is in the hospital. This kind of insurance is cheaper because of the limited risk involved.
- 4 The government has its own insurance programs. These programs are part of the Social Security Acts of 1935 and 1965. In 1935 Social Security provided for medical care for those individuals who qualified for the assistance programs. Those assistance programs were titled: (1) Old Age Assistance; (2) Aid to the Blind; (3) Aid to Families with Dependent Children, and

(4) Aid to the Totally and Permanently Disabled. Individuals receiving assistance were also given help with their medical problems. Since 1965, the Social Security Amendments have provided for Medicare, which is hospitalization for everyone sixty-five years of age and older. This program provides for 90 days of hospitalization and 100 days of extended care. The second part of the Social Security Amendments of 1965 provided for Medicaid. This is medical care for the medically indigent. This program is provided through matching funds by state and federal governments, and people qualify by taking some kind of means test. While the Medicare program is administered by the Social Security Department, the Medicaid program is administered by welfare departments.

- 5 In the United States the medical care system is private in nature. The physician is the key to entrance into the medical care system. The only way a person can be admitted to a hospital is through the physician, except in emergency situations. The physician prescribes all medicines except for those that are sold over the counter. In some cases, it is possible for a consumer to get vision or hearing examinations or some preventative immunizations and dental work without seeing a physician. However, it is apparent that anyone with an illness of a serious nature must see a physician before necessary treatment can be rendered.



SPECIAL ARTICLE

HEALTH-POLICY DIRECTIONS FOR THE 1970'S*

WILLIAM L. KISSICK, M.D.

Abstract The health endeavor in the United States, a \$60,000,000,000 human-services enterprise, is in a state of crisis that challenges the continuation of its pluralistic, independent, voluntary nature. Health care, although still predominantly a private-sector activity, is no longer solely the private concern of the individual. The evolution of the role of the government has proceeded through four phases, beginning with categorical grants-in-aid (1935), investments in the development of health resources

(1946), organization and delivery of health services (1963) and a transition to comprehensive health-care systems (1967). Health-policy deliberations during the 1970's, including the debates over National Health Insurance, must focus on the modification of financing mechanisms and patterns of organization if society is to realize the most effective utilization of its health resources to provide health care for a population projected to reach 250,000,000 by the end of the decade.

ON July 10, 1969, at a press conference held in the East Room of the White House, Robert H. Finch, Secretary of Health, Education, and Welfare, and Dr. Roger O. Egeberg, Assistant Secretary for Health and Scientific Affairs, released their "Report on the Health of the Nation's Health System." The tenor of their findings was suggested by President Nixon in his introductory remarks:

We face a massive crisis in [health care] and unless action is taken, both administratively and legislatively, to meet that crisis within the next two to three years, we will have a breakdown in our medical care system. . . .¹

For months before and since, editorials in newspapers across the country and cover articles in *Time*,² *Business Week*,³ *Fortune*⁴ and like periodicals have been underlining what has become a national preoccupation with the "crisis in health care."

Crises, whether in diseases or during the evolution of social institutions, usually imply turning

points, for better or worse. Sometimes, the alternatives may be extreme: radical improvement or disaster. How the present crisis is resolved will shape the character of the nation's health endeavor for years — probably decades — to come. Clearly, physicians have profound and persuasive reasons, including enlightened self-interest, to see that they participate actively in making the decisions that can lead to the best resolutions of current problems.

What is the nature of the present crisis? This paper will examine factors influencing the organization and delivery of health services, review recent trends in health affairs and suggest future policy directions. The options for physicians are these: to seize the initiative and help shape the future, or to have the future shaped for them. The concluding sentences of the Finch-Egeberg Report forcefully state the challenge to the medical profession in the 1970's:

What is ultimately at stake is the pluralistic, independent, voluntary nature of our health care system. We will lose it to pressures for monolithic government-dominated medical care unless we can make that system work for everyone in this Nation.⁵

THE HEALTH ENDEAVOR CIRCA 1969

The health enterprise in the United States, a vast

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and highly complex social endeavor, accounted for expenditures totaling \$60,300,000,000 in fiscal 1969 — 6.7 per cent of the Gross National Product (GNP). Hospital care accounted for more than a third of the total, \$22,500,000,000; one fifth, or \$11,900,000,000, was paid for physician's services.⁶ At present rates of growth, total expenditures for health and medical care will exceed \$100,000,000,000 before the middle of the 1970's.

The health endeavor, like other enterprises, can be characterized by its basic resources: knowledge, facilities and equipment and manpower. The first resource, biomedical knowledge or "state of the art," determines more than any other the fundamental character of the services provided. The rapidly changing character and rate of growth of the scientific foundation on which medicine is based have yielded one of the principal challenges to the health enterprise.⁷ The body of biomedical knowledge has been estimated to double every decade and an acceleration in even that rate of growth is forecast. Most advances in biomedical research mean changes in both the art and the science of medical practice. Some, such as the development of poliomyelitis and rubella vaccines, allow physicians to apply preventive measures in lieu of the arduous therapeutic and restorative measures in an earlier day to manage the serious sequelae of these diseases. Other developments, including chronic renal dialysis, kidney transplantation, computerized physiologic monitoring, cardiac pacemakers, burn therapy and techniques for dealing with ventricular fibrillation and cardiac arrest, increase both the complexities of medical care and the need and the demand for health services.

The second resource, facilities and equipment, comprises hospitals, medical schools, research institutes, nursing homes, diagnostic and treatment centers, public-health centers, rehabilitation facilities, medical group-practice clinics, community mental-health centers, clinical laboratories, physicians' and dentists' offices and pharmacies. The Master Facility Inventory⁸ of the National Center for Health Statistics reported 30,600 inpatient health facilities in 1967. Of these, 6839 were short-stay hospitals, 1308 were long-stay hospitals and 19,141 were nursing-care and related homes, more than a third of which were skilled-nursing facilities. The American Hospital Association registered 7127 hospitals with almost 1,700,000 beds in 1968.⁹ Nonfederal short-term, general and special facilities, the so-called "community hospitals," provided approximately four out of five of these institutions and half the beds. These facilities are considered by many to be the backbone of the nation's health-care system. The diverse character of these hospitals is quite extraordinary. Only one in 15 has 400 or more beds; half have less than 100 beds. Almost all the hospitals have clinical laboratories and radiologic equipment; three out of five include a pharmacy, and more than half have

blood banks. Resources for physical therapy are available in half, and occupational therapy in a quarter of these institutions. All community hospitals with 100 or more beds have emergency rooms. Virtually all those with 300 or more beds have intensive-care units. Equipment for renal dialysis is found predominantly in the larger institutions, but even so, only half those with 500 or more beds have it.

The third resource, health manpower, has belatedly been acknowledged to be the most critical. Most medical practitioners tend to think of health manpower in relation to the traditional health professions, with physicians being both pre-eminent and predominant. Such a perception was accurate at the turn of the century, when three out of five health professionals were physicians.¹¹ But at present, the nation's 300,000 physicians constitute 10 per cent of the approximately 3,400,000 persons in health occupations.¹² The "health labor force" comprises some three dozen occupational categories and more than 200 separate careers. Physicians are spread among more than 30 specialties. Whereas the population of the United States increased by 29 per cent from 1950 to 1966, the number of persons in health occupations increased by 90 per cent.¹³ Employment in health occupations is projected by the United States Public Health Service to exceed 5,000,000 by 1980.¹⁴ The immensity of this "health labor force" can be appreciated when it is compared with the work force of the entire automotive industry, which employs approximately 2,000,000. Moreover, health manpower ranges from highly skilled and educated scientific specialists of many kinds to certain supportive and maintenance personnel who may have had a minimum of on-the-job training.

Analysis of an enterprise requires an assessment of the "... efficiency in the use of basic resources."⁷ This includes factors such as allocation of resources among various uses, methods of organization to take advantage of existing knowledge and the development of incentives for the production of services. As indicated in Figure 1, delivery systems characterized by various patterns of organization and financing mechanisms translate the resource inputs of the health enterprise into service outputs. Patterns of organization encompass approaches that vary from solo practice to the vast Veterans Administration system of hospitals and clinics. They include partnerships, group practices, visiting-nurse agencies, hospital-based home-care programs, in-plant industrial health services, ambulatory clinics, school-health services and sheltered workshops. Financing mechanisms include fees, salary, capitation payments for the remuneration of physicians and such concepts as community rating, indemnity insurance, service benefits, deductibles, fee schedules, experience-rated premiums and coinsurance. Child-health and well-baby conferences, poliomyeli-

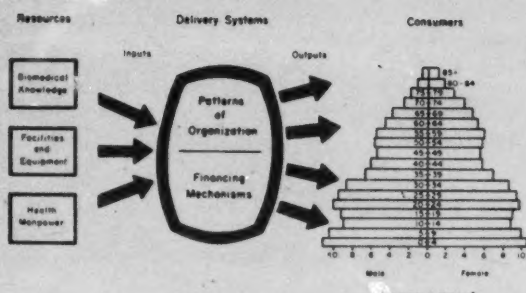


FIGURE 1. Components of Health-Care Systems.

tis immunization campaigns, and chronic renal-dialysis centers indicate the broad scope and variety of delivery systems.

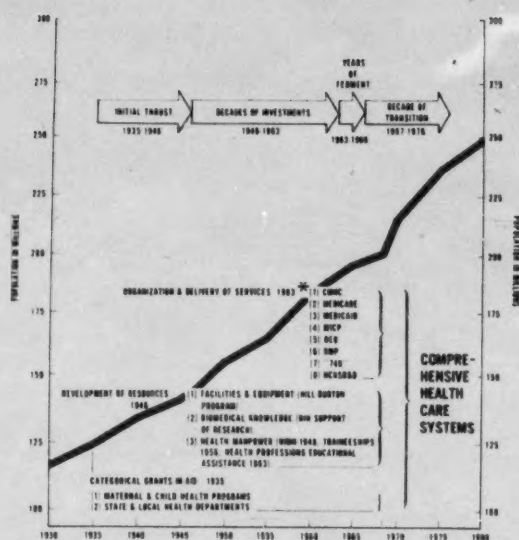
The outputs of delivery systems are services. This seems so obvious that comment appears unnecessary. However, as Dr. Rashi Fein has emphasized, people usually fail to distinguish between inputs and outputs; thus when they cannot get medical care, they complain of a physician shortage. He notes:

Medical services . . . involve the services of many persons and institutions, including physicians . . . Discussion and measurement of changes in the productivity of physicians have usually focused on the number of patient visits per physician. The unit of output was the patient visit rather than the quantity of health service delivered. . . inputs — for example, number of physicians, nurses, hospital beds . . . — have been used to measure output.¹³

Accordingly, a deficiency in availability and accessibility of health services (for example, the inability of a family to find a physician at night when a child is ill, or the overcrowding and long waits in hospital emergency rooms) are evidence to the public of a shortage of physicians. The systems concept illustrated in Figure 1 requires one to think of various kinds of health manpower, the institutional settings in which they work, the points of entry to the delivery systems and the health-care needs and demands of the population. Simply raising the existing physician-population ratio, or increasing the number of other health resources such as hospital beds, is clearly not enough.

EVOLUTION OF NATIONAL HEALTH POLICY

Until quite recently the national emphasis was on increasing the supply of basic resources rather than improving the efficiency of their utilization. For a period of almost 20 years after World War II the role of the federal government concentrated on the investment of billions of dollars in development of health resources. As shown in Figure 2, these investments constituted the second of four phases in the transition of the role of the federal government in health affairs: categorical grants-in-aid during the



* (1) Community Mental Health Centers (CMHC); (2) Title XVIII, Social Security Act of 1965 (Medicare); (3) Title XIX, Social Security Act of 1965 (Medicaid); (4) Maternal and Infant Care Projects (MICP); (5) Neighborhood Health Centers (NHC); (6) Regional Medical Programs (RMP); (7) Comprehensive Health Planning — "The Partnership for Health" (749); and (8) National Center for Health Services Research and Development (NCHSR and D).

FIGURE 2. Major Health Programs of the Federal Government — Transition to Comprehensive Health-Care Systems (Based on Report to the President¹⁶).

initial thrust beginning in 1935; development of resources during the decades of investments beginning in 1946; organization and delivery of services during the years of ferment, 1963-1966; and a decade of transition beginning in 1967 and addressed to the planning and development of comprehensive health-care systems.

Initial Thrust of Federal Involvement

In the first phase, a focus on specialized problems (for example, communicable-disease control) characterized the initial thrust of national health policy. Human misery in the Great Depression dramatized the fact that voluntary efforts, and those of state and local governments, were not sufficient to meet health needs. Health problems among the poor became so serious during the 1930's that the federal government was forced to become concerned for the health of all citizens.

The Social Security Act of 1935 contained provisions addressed to some of the existing widespread health needs. Title V authorized grants to individual states for maternal and child-health programs and Title VI authorized annual appropriations, ". . . for the purpose of assisting States, counties, health districts, and other political subdivisions of the States in establishing and maintaining adequate public health services."¹⁶ Although the responsibility for

seeking and obtaining health care remained the individual's, the community recognized that in certain cases the problems were more than an individual could handle unaided. For such persons, some form of public assistance was required.

Decades of Investment

After World War II the need for major investments in the development of basic resources became evident. In the first place, Congress passed the Hospital Survey and Construction Act in 1946. In 23 years the Hill-Burton Program, as this legislation is most widely known, has helped more than 3700 communities build hospitals, public-health centers, extended-care facilities, diagnostic and treatment centers and rehabilitation facilities. Total expenditures under its matching-grant formula have exceeded \$11,000,000,000, one third of which has been money from the federal treasury, with the remainder raised by individual communities.¹⁷

Secondly, Congress undertook a sustained investment in medical research. The National Cancer Institute (NCI), although founded in 1938, began its rapid growth in appropriations in the 1950's. A series of other national institutes — Heart (NHI), Mental Health (NIMH), Arthritis and Metabolic Diseases (NIAMD), Child Health and Human Development (NICHD) and so forth — were established and charged with conducting research attacks on certain categories of diseases and health problems. Support of research and research training by the National Institutes of Health has constituted the major portion of a federal investment in biomedical and health-related research that has exceeded \$14,000,000,000 in the last 20 years.¹⁸

Although state and local governments had made investments in the third resource — health manpower — federal aid was slower to come. Support for the training of mental-health manpower began as early as 1948. Traineeships for public-health specialists and advanced training for nurses were authorized by Congress in 1956. However, it was not until 1963 that federal legislation for broad subsidy of the education of the health professions was finally passed. This support was further expanded by the Nurse Training Act of 1964, the Health Professions Educational Assistance Amendments of 1965 and the Allied Health Professions Personnel Training Act of 1966.

The assumption that if sufficient funds were invested in the creation of basic health resources, the necessary services would be forthcoming and available to the general population prevailed for almost two decades. However, it became increasingly evident that federal investments in resource development, no matter how massive, would not solve health problems. Our society became increasingly aware that despite the highest per capita expenditures for health and medical care in the world, the United States had neither the finest health services

nor the highest health status as compared with other developed nations. The 1960's brought an end to complacency and a demand for solutions to existing health-care problems. In response, the Administration and the Congress addressed themselves to organization and delivery of services, and initiated an overhaul of the health-care economy.

Years of Ferment

Two major themes characterize the health-policy decisions of the mid 1960's: efforts to guarantee the consumers' capacity to purchase health care; and institutionalization of health services. Attention to the financing mechanisms and patterns of organization that shape health-care delivery systems (Fig. 1) was added to the existing responsibilities of the federal government for categorical grants-in-aid and development of resources (Fig. 2).

The Social Security amendments of 1965 (Public Law 89-97) initiated the effort in the United States to eliminate the economic barriers to medical care. The Medicare and Medicaid legislation specified for certain segments of the population three mechanisms for meeting health-care costs: compulsory social insurance — Title XVIII, Part A; incentive subsidy for the purchase of third-party coverage — Title XVIII, Part B; and matching grants to the states for public purchase of medical care — Title XIX.

Payment by these programs of "usual and customary fees" to physicians, and reimbursement of costs for hospital care followed prevailing financing mechanisms and assumed that the existing health-care system could respond to the population's needs and demands if enough payment for services was provided.

Physician services and hospital services were treated as distinct entities. Except for utilization review committees and a few other such devices, the issues involved in increasing the "efficiency in the use of basic resources" were simply not faced in the effort to assure adequate health care for those eligible under these programs. The emphasis was clearly placed on guaranteeing purchasing power.

The issue of utilization of resources was addressed by means of some half-dozen major pieces of legislation concerned with patterns of organization in delivery systems. Community Mental Health Centers, Comprehensive Health Services for Children and Youth, Office of Economic Opportunity (OEO) Neighborhood Health Centers, Regional Medical Programs, Comprehensive Health Planning (Public Law 89-749) and the National Center for Health Services Research and Development are all concerned primarily with a search for effective and responsive institutional mechanisms for provision of human services. The implications of these new programs that experiment with institutionalization of health services and their import for the 1970's warrant detailed consideration.

Community Mental Health Centers. The first of

the new programs, a nationwide, federal, state and local effort to establish Community Mental Health Centers, has a legislative history going back to the Mental Health Study Act of 1955, which led to the establishment of the Joint Commission on Mental Illness and Health. The Joint Commission's Report, *Action for Mental Health*,¹⁹ published in 1961, called for an extensive reform of existing approaches to the care of the emotionally disturbed, particularly the development of community-based programs as a substitute for large, understaffed mental hospitals. A two-year program of statewide comprehensive mental-health planning to determine needs and resources was funded on July 1, 1963, by the National Institute of Mental Health.

Subsequently, the Mental Retardation Facilities and Community Mental Health Centers Construction Act was signed into law by President Kennedy on October 31, 1963. To qualify, a center has to provide at least five essential services: inpatient care; outpatient care; partial hospitalization; emergency care; and consultation and education. The presence of the following additional services increases the priority for funding: diagnostic service; rehabilitative service; precare and aftercare; training; and research and evaluation. The guidelines further specified a "community" or "catchment area" as "not less than 75,000 and not more than 200,000 persons."²⁰ The legislation was amended in 1965 to add grants to assist staffing of these centers. Almost 400 community mental-health centers have been organized to date — far short of NIMH's goal of 2000 centers by 1975. Nonetheless, the varied approaches across the country are demonstrating institutional innovations in health-care delivery systems consistent with the bold new approach called for in the Presidential message that proposed the program.

Health Services for Mothers and Children. The Community Mental Health Centers suggest patterns of organization that are being utilized by programs aimed at providing health services for mothers and children. Although fewer in number and emphasizing ambulatory services, these programs seek to develop a comprehensive range of health and social services on a community basis. The 1963 Maternal and Child Health and Mental Retardation Planning Amendments authorized project grants to state or local health departments to cover three quarters of the costs of comprehensive maternity and infant-care projects for women in low-income families. Since the spring of 1964, 55 projects have received support, including some in the 10 largest cities in the nation. Funds are being used to increase accessibility of prenatal and postnatal services for the groups that have had the highest infant mortality rates.

The 1965 Maternal and Child Health Amendments to Title V of the Social Security Act created grants-in-aid to assist the provision of Comprehen-

sive Health Services for Children and Youth — better known as the C & Y Projects. The determination to make health care available for certain groups in the population was unequivocal. As in the earlier legislation, project grants cover up to 75 per cent of costs. In addition to state and local health agencies, schools of medicine and affiliated teaching hospitals became eligible applicants. In pursuing a comprehensive approach, the legislation required that a project co-ordinate services with state or local health, education and welfare programs for the children served, and include at least "screening, diagnosis, preventive services, treatment, correction of defects, and aftercare, both medical and dental."²¹ To date, 59 projects are attempting to develop innovative health-care delivery systems not unlike the Community Mental Health Centers.

The similarity in programmatic approach increased when the Child Health Act of 1967 extended each of the above programs to June 30, 1972, and added authorization for "payment of the reasonable cost of . . . inpatient hospital services . . ."²² An amendment also took notice of the costs and effectiveness of these programs by calling for maximum use of health personnel with varying levels of training. Accordingly, knowledge of social, cultural and demographic structure of the populations served has been sought in efforts to identify health needs and the most appropriate kinds of new health manpower to complement and supplement the efforts of the traditional health professions — physicians, dentists, nurses and social workers.

OEO Neighborhood Health Centers. Widespread experimentation with health-care teams, indigenous community workers and community health aides is a prominent feature of the Neighborhood Health Centers supported by the Office of Economic Opportunity (OEO). Research, demonstration and training funds authorized by the Economic Opportunity Act of 1964 were used to assist three neighborhood health centers: the Columbia Point Housing Project in Boston, undertaken by the Tufts University School of Medicine; the Gouverneur Ambulatory Unit of the Beth Israel Medical Center in New York City; and one in Denver, Colorado, sponsored by the City Department of Health and Hospitals. Early in the following year five additional projects were funded: in Mound Bayou, Mississippi (Tufts — Delta Health Center); in the Watts District of Los Angeles (USC School of Medicine); in the Bronx, New York (Montefiore Hospital and Medical Center); and two in Chicago — Mile Square (Presbyterian-St. Luke's Hospital) and North Lawn-dale (Mount Sinai Hospital).

In 1966 Senator Edward Kennedy introduced an amendment to the Economic Opportunity Act to earmark funds to assist: ". . . the development and implementation of comprehensive health services programs focused upon the needs of persons residing in urban or rural areas having high concentra-

tions of poverty and a marked inadequacy of health services."²³ Congress appropriated \$50,000,000 in 1967 to fund these Comprehensive Health Services Projects. As of July 1, 1969, 49 projects serving neighborhoods or defined geographic areas with target populations ranging from 5000 to 65,000 had been launched, and another half-dozen were in various stages of planning. Sponsorship varies among health departments, medical schools, voluntary hospitals, community action agencies, group practices, medical societies and combinations of such institutions. Efforts to develop community-based health-care delivery systems have frequently been established with the assistance of joint funding through OEO and C & Y projects.

Although the target populations are defined by differing criteria — category of illness, age or income — these programs represent an effort by the federal government to move from categorical to comprehensive funding (Fig. 2) in its efforts to meet the health needs of the population. Each program represented attempts to organize delivery systems that transformed resources into services for a defined population of consumers (Fig. 1). In several programs modified financing mechanisms through Medicaid were pursued in addition to innovations in patterns of organization. Taken together, these programs left most of the population and health problems untouched. However, institutionalization of health services on a broader scale was addressed by Regional Medical Programs and the Partnership for Health.

Regional Medical Programs. In the four years since President Johnson signed into law the Heart Disease, Cancer and Stroke Amendments of 1965, 55 Regional Medical Programs have been awarded planning grants to support surveys of needs and resources, feasibility studies and organization and staffing of planning groups. Of these, 40 have received operational grants to support activities such as remote computer-aided diagnosis and closed-circuit physiologic monitoring, health-services utilization data systems, mobile coronary-care units, regional communications systems, health-services evaluation, multiphasic screening and the organization of "coordinated hospital systems," as advocated in the original proposal²⁴ that led to the Hospital Survey and Construction Act of 1946. Despite uneven progress nationally, regionalization of health services is emerging as an effort of the nation's 100 medical colleges and their related health professional schools and affiliated hospitals to evolve mutually beneficial working relations with medical practitioners, community hospitals and other health resources. Thus, informal patterns for provision of health services and existing referral patterns are emphasized as a basis for optimal regionalization.

If one accepts the characterization of the health enterprise as an industry based on the collection, interpretation, organization, storage, retrieval and

application of data, an expanded role for computer technology seems highly probable. The scale of this technology is suggested by the Multi-Phasic Screening Program²⁵ developed by the Permanente Medical Group in Oakland, California, and by the experience of American Airlines and IBM, which invested \$30,000,000 and 10 years in the development of a reservation system.²⁶ This was an uncomplicated information system in comparison to the problems being addressed by computer-stored medical records, and other applications of computers in medicine.^{27,28}

In his book, *The New Industrial State*, John Kenneth Galbraith describes the emergence of large corporate endeavors, which he calls "Technostructures," in response to the imperatives of technology.²⁹ These involve the planning, organization and co-ordination of specialized manpower and large sums of capital for extended periods to the solution of complex scientific and technical problems. Among health-care institutions an orderly, pragmatic and informed evolution from "co-operative arrangements," through contractual affiliations, to corporate mergers will probably be required to attain the requisite investment and management base necessary for the costly health-systems technology of the present and future. The planning and organization of health services "Technostructures" could be the Regional Medical Program's most valuable contribution to optimal institutionalization in the health enterprise.

The Partnership for Health. The essence of a new direction in health policy was specified by the Partnership for Health. This legislation declared health a national priority, the guarantee of access to health services a societal responsibility, and planning an imperative. As stated in its "Findings and Declaration of Purpose":

The Congress declares that fulfillment of our national purpose depends on promoting and assuring the highest level of health attainable for every person . . . [and] . . . marshaling of all health resources to assure comprehensive health services of high quality for every person. . . .³⁰

The legislation specified the necessity for recognizing interdependency and promoting co-ordination of the private and public sectors of the health enterprise through comprehensive planning for health services, health manpower and health facilities.

The Comprehensive Health Planning and Public Health Service Amendments of 1966 (Public Law 89-749) rivals Regional Medical Programs in potential for reshaping the nation's health enterprise. The legislation is essentially two related, but nonetheless distinct programs. Since this law has been explained in detail to the readers of the *Journal*,³¹ the comments here will be brief. The first three sections are addressed to planning:

314 (a) Grants to States for Comprehensive State Health Planning;

314 (b) Project Grants for Areawide Health Planning; and

314 (c) Project Grants for Training, Studies and Demonstration.

Considering the existing state of the art, an authorization to support and foster comprehensive health planning is somewhat premature. Ideally, training (314c) should have preceded efforts toward comprehensive planning (including 314a and 314b) by several years. There is now a paucity of professionally trained health planners to man these rapidly proliferating planning agencies. But, unfortunately, the nation's medical centers and universities would probably not have given priority attention to training planners had not a congressional mandate for planning applied the spur.

The parts of the legislation concerned with grants-in-aid to support health services —

314 (d) Grants for Comprehensive Public Health Services, and

314 (e) Project Grants for Health Services Development —

have a legislative history dating from the Categorical and General Health Grants first authorized by Title VI of the Social Security Act of 1935. These two sections are addressed to subsidizing development and delivery of health services at state and local levels, and alleviating the strictures imposed by determination, solely at the national level, of priorities and funding among categories of diseases and health problems. The intent of this legislation and the circumstances fostering its passage are best described by Walter Heller, former chairman of the Council of Economic Advisors, who developed jointly with Joseph A. Peckham, of the Brookings Institution, the proposals for block grants-in-aid to state and local governments as a mechanism of revenue sharing. In his *Godkin Lectures, New Dimensions of Political Economy*, Heller notes, "We must move toward broader categories that will give states and localities more freedom of choice, more scope for expressing their varying needs and preferences, within the framework of national purpose."³²

By requiring that grants-in-aid under 314 (d) and projects to support "public health services" funded by 314 (e) be in accordance with plans developed by the state agency designated by the governor pursuant to 314 (a), the two components of the Partnership for Health were linked, and the nation's nonexistent "health planners" were called upon for action now! Although the Heller-Peckham proposals were still under active debate, the health version was enacted by Public Law 89-749.

The intent of the Partnership for Health regarding innovations in health-care delivery systems was made even more explicit by the 1967 Amendments, which created Section 304 of the Public Health Service Act and added authority to contract with institutions and organizations to conduct research and development concerning "new methods or improvement of existing methods of organization, delivery, financing of health services."³³ This is the primary mission of the newly established Na-

tional Center for Health Services Research and Development. The close relations between the concerted effort to effect systems change inaugurated by the Partnership for Health and the programs described earlier in this paper are illustrated by the kinds and variety of Project Grants for Health Services Development supported under Section 314 (e), frequently with joint funding by OEO or C & Y grants (or both). As of October, 1969, 19 projects had been funded, including prepaid, group practices sponsored by university (Harvard Community Plan) and community (Community Health Care Center Plan, New Haven, Connecticut), community-hospital-based comprehensive family health care (Baroness Erlanger Hospital, Chattanooga, Tennessee), health-department neighborhood service project (Minneapolis, Minnesota) and community health centers sponsored and owned by consumers (West Oakland Health Council, California, and Yeatman District Community Corporation, St. Louis, Missouri).

FUNDING THE DEVELOPMENT OF COMPREHENSIVE HEALTH-CARE SYSTEMS

As shown in Figure 2, and detailed earlier, the health policy of the federal government, beginning in 1935, has evolved and grown in a series of expanding steps that reflect shifting public emphasis: categorical grants-in-aid (1935); development of resources (1946); organization and delivery of services (1963); and planning and development of comprehensive health-care systems. The federal role has shifted from the support of categorical to comprehensive programs, and from virtually exclusive involvement with public agencies to an increasing investment of tax monies in voluntary or private institutions. Figure 3 shows the funding mechanisms of major federal grant-in-aid programs and their relative emphasis on official or voluntary agencies for planning, development and operation of comprehensive health-care systems. The Categorical and General Health Grants and those for Maternal and Child Health utilized agencies of state government to pursue their objectives. In contrast, the Partnership for Health authorizes granting of federal funds to support health planning by official and voluntary agencies and subsidizes a mixture of effort by the public and private sectors in development and operation of health-care delivery systems.

The Hill-Burton program established many precedents in the health policy of the federal government. Planning, concerned primarily with a survey of existing health-care facilities and setting priorities among service areas for new construction, was the responsibility of official agencies at the state level. The great majority of funds, however, were granted (by the federal government via state governments) to voluntary institutions.

In 1964 the precedent for use of public funds to subsidize planning by voluntary health agencies

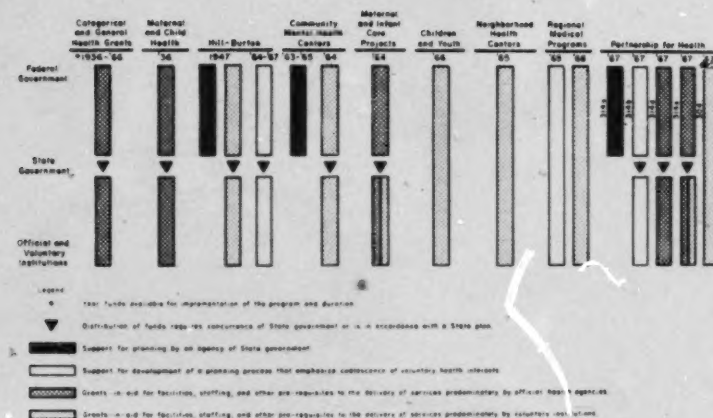


FIGURE 3. Major Federal Grant-in-Aid Programs That Assist the Planning, Development and Operation of Comprehensive Health-Care Systems.

was authorized by the Hill-Harris amendments. This legislative authority was subsequently subsumed by Section 314B of the Partnership for Health. The Community Mental Health Centers program followed the Hill-Burton example of planning by a state governmental agency, with support of construction of facilities predominantly by voluntary institutions. The 1965 amendments broadened the subsidies to include support of staffing and other operating costs.

The Maternal and Infant Care Projects, Children and Youth programs, OEO Neighborhood Health Centers and Regional Medical Programs typify the increasing involvement of voluntary institutions in the planning, development, and operation of comprehensive health-care systems that function in the public interest. The Partnership for Health, more than any other piece of health legislation enacted by the 88th and 89th Congresses, has extraordinary implications for shaping the health enterprise to fit into and co-ordinate with what Gunnar Myrdal has called, "the institutional infrastructure of modern organized society . . . [that is] . . . in charge of what in effect is public policy."³⁴ In his essays *Beyond the Welfare State*, Myrdal describes the dynamics of decision making in a democratic society as follows:

... Within the framework of state controls the organizations have gained and not lost in influence . . . regulatory coordination, undertaken by the state authorities, is ordinarily carried out only after consultation and actually in cooperation with the organizations . . . the increasing strength, number, and activity of these organizations . . . has meant a spreading out of participation, initiative, and influence . . . to ever larger sections of the people . . . It represents a decentralization of the making and implementation of public policies.³⁵

The several pieces of health legislation concerned with planning and developing community and regional health-care systems are searching for optimal mechanisms for "a decentralization of the making and implementation of public policies" — in this

instance, comprehensive health care for the entire population.

A principal issue in health at present involves the necessity of defining what is in effect a modified market economy in medical care that merges institutional initiative, autonomy and flexibility with public accountability. Society is searching for a social instrument short of government that functions adequately in the public interest — some sort of public utility, community corporation, regional authority or perhaps a franchised service not unlike the airlines, with governmental regulation and standards, a concept espoused by White in the *Journal*.³⁶

National Health Insurance

Several proposals are being advanced for national health insurance as a *sine qua non* for assuring the right to health care of every citizen in the United States. The year 1969 witnessed advocacy of universal health insurance from political quarters that ranged from Representative John Dingell, Jr., who introduced the National Health Insurance Act (H.R. 24) into the first session of the 91st Congress, to the American Medical Association, which unveiled "Medi-credit," its proposal for income-tax credits to assist the purchase of voluntary health insurance. Proposals have been advanced or are being developed by Governor Rockefeller, the Aetna Life Insurance Company, Senator Javits, Senator Kennedy and the Committee of 100 for National Health Insurance organized by Walter Reuther. The AFL-CIO-drafted legislation was introduced by Representative Martha W. Griffiths, of Michigan, as H.R. 15779 on February 9 of this year. The breadth and intensity of present discussions, and the diversity of sponsorship and endorsements of various proposals, indicate that the question is no longer whether or not the United States will adopt national health insurance but when, through what mechanisms, and with inclusion of what services.

Unfortunately, much of the discussion of national health insurance focuses on financing the costs of health care and fails to give adequate attention to the patterns of organizing services. There is real danger that in a desperate effort to check rising health-care costs and to curb the excesses of existing financing mechanisms, restrictive, shortsighted and punitive measures may be taken instead of positive solutions to complex issues. An emphasis on incentives rather than controls is to be preferred in the search for solutions to the "crisis in health care." The following conclusion by analysts of the national economy is equally pertinent to the health enterprise: "Without suitable incentive and reasonable allocation of its resources, a nation can fall short of getting maximum output from its manpower, capital, and laboratory knowledge."³⁷

This issue of utilization of resources will be particularly acute during a decade in which those in need of health care will probably increase by 25 per cent to 250,000,000 (Fig. 2), thus placing even larger demands on existing and anticipated health-manpower resources. Modification of the health-care system to increase the quality and quantity of its output of services must be the priority concern of health policy.

The National Advisory Commission on Health Facilities appointed by President Johnson to review and make recommendations concerning the Hill-Burton Program concluded that at this point in the evolution of the health enterprise, good resource utilization was even more critical than resource development: "... the Nation must now concentrate upon organizing health facilities and other health resources in effective, efficient, and economical community systems of comprehensive health care available to all."³⁸ This succinct declaration of the health endeavor's objectives implies the critical agenda for the 1970's if comprehensive health care is to become a reality for the entire population.

TOWARD COMMUNITY AND REGIONAL HEALTH-CARE SYSTEMS

The organization and delivery of comprehensive health care will require a synthesis of public-health and medical care into a new kind of health enterprise. The heretofore limited interaction of public-health and medical practice in the United States can be attributed to the fact that they existed and functioned in quite separate worlds. Although leading health authorities had warned of the shortcomings inherent in the artificial fragmentation of the continuum — health education, prevention, early disease detection, diagnosis, treatment and rehabilitation — the diagnosis and treatment of most acute illnesses became the domain solely of medical practitioners, who largely ignored the other phases of the

continuum. These, almost by default, became the responsibilities of public-health agencies.

The differing perspectives are best suggested when the population orientation of public health is contrasted with the single patient approach of medical practice. A population focus implies not lack of interest in the individual patient, but rather that the overall objective of comprehensive health-care systems is the realization of "... the highest level of health attainable for every person"³⁹ — or, as scientists attempting to conceptualize a health index have suggested, "... the optimal functioning of an individual in a role appropriate to his age and sex."³⁹

A comprehensive health-care system is diagrammed in Figure 4, in which the components of health-care systems shown in Figure 1 are linked together by lines of interaction and feedback. Community and regional institutions have been added as the locus of responsibility for planning and administering comprehensive health-care systems.

The feedback line at the top of the diagram indicates that the health needs and health-care expectations of the nation's population, in addition to attitudes toward financing, the availability of health services and medical-care costs, will influence the character of future delivery systems, subsidization of their development, proportional allocation of public funds for investment in development of basic health resources and payments from the private sector predominantly through third-party contracts. As discussed above, Community Mental Health Centers, Children and Youth programs, OEO Neighborhood Health Centers and Project Grants for Health Services Development (314e) represent initial efforts of the federal government to subsidize new health-care delivery systems. Regional Medical Programs and Comprehensive Health Planning can assist the creation of the community and regional institutions responsible for planning, development and operation of comprehensive health-care systems. As indicated by the feedback lines at the bottom of Figure 4, these institutions, whether they are community health-care corporations, health-services utilities, franchised regional medical systems or the like, will be confronted with the necessity for formulation of optimal delivery systems in terms of available resources balanced against needs and demands for health care of the population served.

The creation of effective programs will require assessment of health problems in population terms to formulate and evaluate service strategies. Moreover, the performance of delivery systems will be increasingly judged by their effectiveness in improving the health of the population... whether through increased longevity, decreased morbidity, reduction in days of disability, the portion of the population immunized or the like. The management

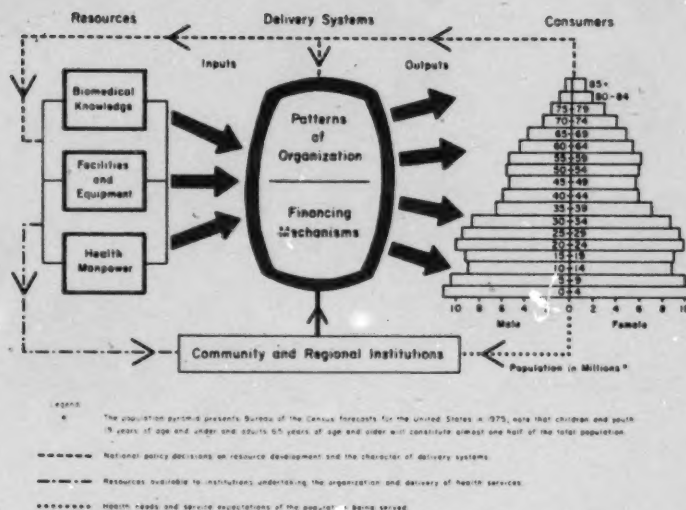


FIGURE 4. Graphic Representation of Comprehensive Health-Care Systems.

of the community and regional institutions must plan service distribution strategies, an approach that is characteristic of organized public-health programs, to meet the health-care needs of the population being served. It is important to remember that the demands for health services can be virtually insatiable, depending on a society's level of expectation and the resources that it wishes to allocate to them. Accordingly, comprehensive health-care systems in the 1970's must accord a high priority to realizing the maximum health services from available resources and to influencing the consumer's health practices and utilization of services.*

Quite properly, medical practitioners are primarily concerned with providing services to their patients. Many physicians are convinced that this requires a delivery system of "solo practice and fee for service" as the preferred pattern of organization and financing mechanism.

The dimensions of the "crisis in health care" and its prominence as a political issue argue that physicians should participate in increasing the effectiveness and efficiency of delivery systems, and, where necessary, assist in their appropriate modifications. Figure 4 suggests two kinds of roles for physicians in the planning and development of comprehensive health-care systems. The first concerns the area most familiar to the practitioner — patient care. It provides the opportunity to improve resource utilization, particularly by incorporating new kinds of health manpower into private medical practice. For example, such approaches as well-baby conferences, immunization campaigns and

many health-education services are readily adaptable to the practice of office pediatrics. Efforts to provide the consumer with a mechanism for budgeting and prepaying health-care costs, such as the San Joaquin Foundation for Medical Care, sponsored by organized medicine in California, can be emulated and even improved upon.

Physicians can also take a broader role in the organization of community and regional institutions. Such roles can be developed in connection with the several federally assisted programs described earlier in this paper. Realization of their full potential seems to offer the last chance for preservation of "the pluralistic, independent, voluntary nature of our health care system."³

The federal grant-in-aid programs identified in Figure 3 are being subjected to review by the Administration and the Congress in an effort to develop appropriate modifications that would increase their potential for stimulating and assisting the planning, development and operation of comprehensive health-care systems. Funding priority to encourage group practice and neighborhood health centers figured prominently in the deliberations associated with extension of the Hill-Burton legislative authorization. The Senate Finance Committee's Staff Report, Medicare and Medicaid: Problems, issues, and alternatives,⁴¹ released in February, includes a recommendation for a strengthened and expanded role for health-planning agencies. On February 16, 1970, Senator Javits introduced the Health Services Improvement Act of 1970 (S. 3443) for the Administration. The intent of this legislative proposal is the extension, modification, and coalescence of the existing authorizations for Regional Medical Programs, Comprehensive Health Planning (Section 314), the National Center for Health Services Research and

*The formulation of an innovative system that emphasizes technology, improved manpower utilization and health education is advanced by Garfield,³⁹ one of the founders of the Kaiser-Permanente program.

Development, and the National Health Survey. The preamble to the Bill states its purpose as follows⁴²:

To amend and improve the Public Health Service Act to aid in the development of integrated, effective, consumer-oriented health care systems by extending and improving regional medical programs, supporting comprehensive planning of public health services and health services development on a State and area-wide level, promoting research and demonstrations relating to health care delivery, encouraging experimentation in the development of cooperative local, State, or regional health care delivery systems.

Perhaps the most dramatic development to date was Secretary Finch's March 25, 1970, statement on "Medicare and Medicaid Reforms," in which he announced the Department's proposal to amend Title XVIII of the Social Security Act to include a Part C under which Medicare beneficiaries may select comprehensive health care through a prepaid group practice in lieu of the existing insurance provided by Parts A and B. By combining coverage for hospital and physician services and making capitation payments that are less than existing rates for conventional Medicare benefits, the federal government anticipates substantial savings in addition to providing a large stimulus to the development of comprehensive group practice. Medicaid would be similarly amended to encourage states to seek annual capitation contracts as an option for the medically indigent covered under Title XIX.

A description of a few organized health-care delivery systems suggests their range, variability and potential for using federal grant-in-aid programs (Fig. 3) to assist in restructuring of existing resources and delivery systems (medical centers, community hospitals, public-health centers, group practices, visiting-nurse agencies, industrial clinics, nursing homes and so forth) into comprehensive health-care systems.

The Kaiser Foundation Medical Care Program is the most prominent comprehensive health-care system in the nation. This prepaid, group-practice plan provides coverage for more than 2,000,000 enrollees through 19 medical centers for inpatient and outpatient care, 29 clinics, more than 2000 physicians and many other resources. The organization, which emphasizes management capabilities and techniques, recently expanded to Cleveland, Ohio, and Denver, Colorado, from its existing base in California, Oregon, Washington and Hawaii. The Health Insurance Plan of Greater New York (HIP), Group Health of Puget Sound, Community Health Association of Detroit and Group Health Association of Washington, D.C., are also good examples. Such group practices combined with prepayment appear to offer the best vehicle for specifying contractual arrangements between providers and consumers of health care in which there are incentives for optimal utilization of resources by the delivery system and of services by the population covered. An expansion of this ap-

proach to the organization and delivery of health care appears to be in the best interests of both organized medicine and the electorate.

The Hunterdon Medical Center in Flemington, New Jersey, a genuine community health center, brings together the activities of numerous official and voluntary community health agencies with a 160-bed community hospital staffed by two dozen full-time medical specialists working in concert with an equal number of family physicians located throughout the county, all as part of a community effort to realize comprehensive health care for the 70,000 residents of Hunterdon County. The hard-core Appalachian area of eastern Kentucky is the site of an emerging comprehensive health program that uses and integrates the energies of a chain of nine hospitals built by the United Mine Workers but now owned and operated by the Appalachian Regional Hospitals, groups of practicing physicians, the Frontier Nursing Service, state, county and local health departments, the University of Kentucky Medical Center, community colleges and several voluntary health agencies. Not far away, in South Carolina the Greenville Hospital System includes one 600-bed general hospital, a 40-bed extended-care facility, three small community hospitals (70, 60 and 40 beds), an 80-bed nursing home, a 55-bed mental-health center, a 200-bed rehabilitation facility and a child-guidance and education unit — all under unified management. In Denver, the Department of Health and Hospitals has developed, over the last five years, a neighborhood health program to serve some 100,000 people, approximately 20 per cent of the city's population. This decentralized, family-centered comprehensive health-care system comprises two neighborhood health centers and eight health stations providing ambulatory services, including family planning, mental health and well-baby clinics in addition to visiting-nurse services. Inpatient care and other backup is provided by the Denver General Hospital, which is also the base for the city-operated ambulance service. The staffing of the program includes 60 physicians, 15 dentists, more than 100 public-health and clinic nurses and 30 social workers, as well as nutritionists, pharmacists, health educators, podiatrists, optometrists, nurse practitioners and 200 community health aides.

Other examples of effective organization of resources could be cited. These have been selected to illustrate the multiple kinds of options for a pragmatic and pluralistic approach to achieve the preferred alternatives to "monolithic government-dominated medical care."⁴³ In the words of former Surgeon General William H. Stewart, the United States has an "... emerging system of medical services, a system which is neither 'state medicine,' nor 'socialized medicine,' nor 'private medicine,' but a combined public-private effort for comprehensive health care in every American community."⁴³ The

shaping of that "emerging system" is the task for the 1970's.

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USING COMMUNITY HEALTH SERVICES

- 1 Generally speaking, there are three factors which determine the level of health that a community enjoys at any point in time. The first is the nature and severity of disease within the population. The second factor consists of theories concerning the causes, treatment, and control of the diseases that are prevalent within the population. The third factor consists of the prevailing social, theological, economic, and political ideologies within the community. These three factors interact at all times to affect community health.
- 2 Factors which determine the makeup of a public health program within a community include: (1) the needs and wants of the people, which determine how they accept the program; (2) the religious or theological beliefs of the people; (3) any legal requirements that may exist related to an illness; (4) the scientific knowledge available at the time; (5) accessibility to the problem; and (6) the wishes of health personnel.
- 3 An information and referral service agency directs people to organizations that can help them with their health or welfare needs. If there is not a specific agency for this purpose, usually the local health department or another health agency assumes this responsibility.

COMMUNITY HEALTH

Unit Study Guides

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**INSTITUTE FOR PERSONAL AND CAREER DEVELOPMENT
CENTRAL MICHIGAN UNIVERSITY**

COMMUNITY HEALTH
UNIT STUDY GUIDES

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MAJOR HEALTH PROBLEMS IN THE UNITED STATES

Unit One

INTRODUCTION

Community Health deals with the health needs of people. Because of the complex nature of health problems and the number of people involved, individuals cannot solve them alone. It is, therefore, necessary for people in communities to work together toward the common goal of providing many of their health needs. This course is a study of community efforts to solve some of the complex health problems facing our country today.

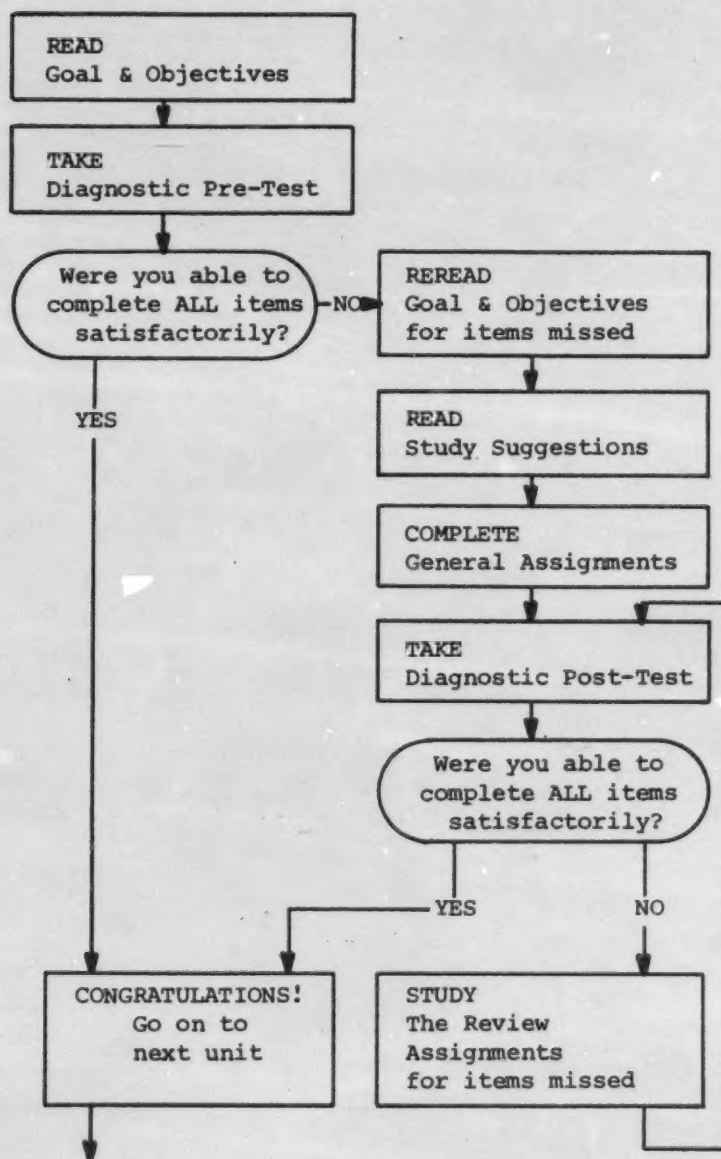
The complexity of modern health problems stems from the interrelation of many factors within a community. Social, physical, and mental climates affect individual and community health in positive or negative ways. Overcrowding in urban ghettos, for example, can give rise to crime and poor mental health, as well as contribute to the spread of disease.

Many forces are constantly changing community health needs. Federal and state legislation related to health and welfare, the scientific explosion, and the changing patterns of organization for the delivery of health services are only a few of the forces affecting community health. Such dynamic forces underscored the significance of studying community health in today's world.

An understanding of today's community health efforts requires some understanding of community health history. Present-day programs are the result of contributions of individuals from many disciplines and backgrounds. It is the purpose of this course to familiarize the student with community health problems and the programs which have been developed to meet these problems over the last century and a half.

In this unit, Unit One, you will learn the leading causes of death and disability, as well as health habits that favorably and unfavorably influence these diseases and conditions.

STUDY MAP



GOAL

Become aware of the major causes of illness, disability, and death; their prevalence, and trends.

OBJECTIVES

1. Given a list of the leading causes of death in the United States, you will order the list according to frequency.
2. Of the ten leading causes of death, you will indicate those that are (1) chronic and degenerative diseases, and (2) those that are communicable diseases.
3. Given two bar graphs or tables of numbers representing the deaths due to (1) chronic and degenerative diseases, and (2) communicable disease in 1910 and in 1970, you will indicate which bars (or numbers) must correspond to chronic and degenerative diseases and which correspond to communicable diseases.
4. Given a list of the leading causes of permanent disability, you will order the list according to frequency.

4 UNIT ONE STUDY GUIDE

5. Given a list of twenty-one communicable diseases, you will indicate (with no more than two errors) which are more readily controlled by immunization.
6. Given six descriptions of health conditions, you will name the health habits that are related to each of the conditions (with no more than one error).

DIAGNOSTIC PRE-TEST

1. In the list of 12 items below, order the ten leading causes of death in the United States according to frequency. Use number 1 for the most frequent cause and number 10 for the least frequent.

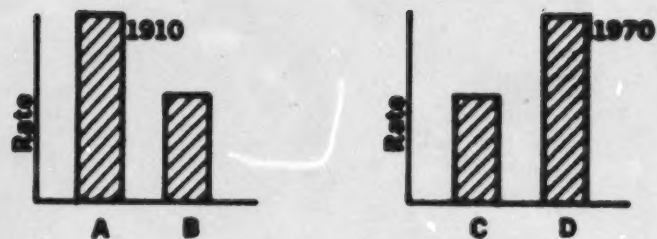
- ___ Diseases of early infancy
- ___ Emphysema
- ___ Cancer
- ___ Cirrhosis of the liver
- ___ Accidents
- ___ Heart disease
- ___ Suicide
- ___ Congenital malformations
- ___ Stroke
- ___ Influenza and pneumonia
- ___ Diabetes mellitus
- ___ Arteriosclerosis

2. From the ten leading causes of death in the United States, list those that are chronic or degenerative in nature and those that are communicable in nature.

Chronic & Degenerative

Communicable

3.



In each of the two bar graphs above, one bar represents the death rate in the U.S. due to all chronic and degenerative diseases and the other represents the death rate due to communicable diseases. Which two bars most closely represent causes of death due to communicable diseases for the years indicated on graphs.

- (a) A and C
 - (b) A and D
 - (c) B and C
 - (d) B and D
4. In the list below, order the eight causes of disability in the United States according to frequency. Use number 1 for the most frequent and number 10 for the least frequent.

- ___ Hypertension without heart involvement
- ___ Visual impairments
- ___ Asthma - hay fever
- ___ Heart conditions
- ___ Mental and nervous conditions
- ___ Arthritis and rheumatism
- ___ Paralysis, complete or partial
- ___ Impairments of back or spine

5. In the list of communicable diseases below, place a check by those that cannot be readily controlled by immunizations.

☐ Measles	☐ Pneumococcal pneumonia
☐ Meningitis	☐ Impetigo
☐ Streptococcal infections	☐ Diphtheria
☐ Smallpox	☐ Bacillary dysentery
☐ Ringworm	☐ Influenza
☐ Chicken pox	☐ Poliomyelitis
☐ Pertussis	☐ Histoplasmosis
☐ Leprosy	☐ Typhoid fever
☐ Venereal disease	☐ Viral hepatitis
☐ Mumps	☐ Malaria
☐ Tetanus	

6. (a) List one behavioral habit that has been associated with heart disease, cancer, and chronic obstructive pulmonary disease.
- (b) What precaution will often result in the early detection of chronic conditions and thus help to delay much of the disability that accompanies them?
- (c) What habit improves muscle tone, retards the development of chronic conditions such as diabetes and heart disease, and helps organs to function properly?
- (d) Name one health habit which has proved to be very effective in maintaining a well-functioning heart, making people less accident-prone, and delaying the onset of arthritis.

6. (e) What health habit, if developed early and maintained throughout a lifetime, seems to aid in the handling of leisure time more effectively, helps to maintain a good mental outlook, and helps to avoid depression later in life?
- (f) What kind of habits are able to help people to avoid bodily damage from all forms of accidents?

PRE-TEST KEY

1. 6 Diseases of early infancy
Emphysema
2 Cancer
9 Cirrhosis of the liver
4 Accidents
1 Heart disease
10 Suicide
Congenital malformations
3 Stroke
5 Influenza and pneumonia
8 Diabetes mellitus
7 Arteriosclerosis

(2 errors allowed)

2. Chronic & Degenerative

Heart disease
Cancer
Stroke
Arteriosclerosis
Diabetes mellitus
Cirrhosis of the liver

Communicable

Influenza and pneumonia
Diseases of early infancy

(No errors allowed)

3. (a) A and C

4. 7 Hypertension without heart involvement
3 Visual impairments
8 Asthma - hay fever
1 Heart conditions
5 Mental and nervous conditions
2 Arthritis and rheumatism
4 Paralysis, complete or partial
6 Impairments of back or spine

(1 error allowed)

- | | |
|-----------------------------------|---------------------------------|
| 5. <u> </u> Measles | <u>x</u> Pneumococcal pneumonia |
| <u>x</u> Meningitis | <u>x</u> Impetigo |
| <u>x</u> Streptococcal infections | <u> </u> Diphtheria |
| <u> </u> Smallpox | <u>x</u> Bacillary dysentery |
| <u>x</u> Ringworm | <u> </u> Influenza |
| <u>x</u> Chicken pox | <u> </u> Poliomyelitis |
| <u> </u> Pertussis | <u>x</u> Histoplasmosis |
| <u>x</u> Leprosy | <u> </u> Typhoid fever |
| <u>x</u> Venereal disease | <u>x</u> Viral hepatitis |
| <u> </u> Mumps | <u>x</u> Malaria |
| <u> </u> Tetanus | |

(2 errors allowed)

6. (a) Smoking cigarettes
 (b) Periodic physical examinations
 (c) Exercise
 (d) Rest, relaxation, or sleep
 (e) Interesting hobbies
 (f) Safety

(1 error allowed)

STUDY SUGGESTIONS

You will find that objectives 1, 2, 4, 5, and 6 require you to memorize some material. Be efficient: use the procedure outlined for you in the Study Map. Before reading the General Assignment, reread the Goal and Objectives to find out what you will be required to know. Read the General Assignment, and test yourself with the Diagnostic Post-Test. If you miss items on the Post-Test, consult the Review Assignment and study the material for the items you missed.

For objectives 1, 2, 4, 5, and 6, the Credit Exam will require you to recall the same information as is required of you on the Diagnostic Post-Test. Objective 3 requires that you understand the trends in deaths due to communicable, and chronic and degenerative diseases. The Diagnostic Post-Test requires that you make an interpretation based upon that trend. The Credit Exam will require you to make a different interpretation but it will be based on knowledge of the same trend.

ASSIGNMENTS

General

TEXTBOOK:

Chapter 1
Chapter 3

SUPPLEMENTAL READINGS:

Major Health Problems in the United States,
page 1

Review

TEST ITEM MISSED

STUDY

- | | |
|-------------|---|
| 1 | Textbook, page 7 |
| 2 | Textbook, pages 59-92 |
| 3 | Textbook, pages 57-59 |
| 4 | Supplemental reading,
paragraph 1 |
| 5 | Supplemental reading,
paragraph 2 |
| 6 | Supplemental reading,
paragraphs 3-8 |

DIAGNOSTIC POST-TEST

1. In the list of 12 items below, order the ten leading causes of death in the United States according to frequency. Use number 1 for the most frequent cause and number 10 for the least frequent.

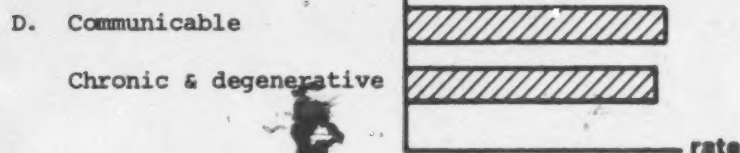
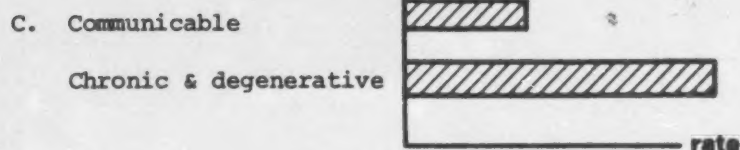
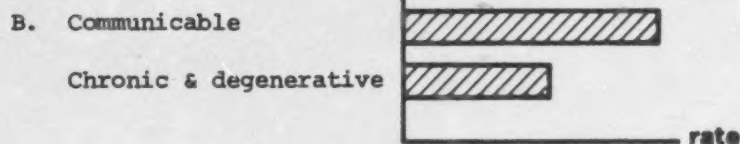
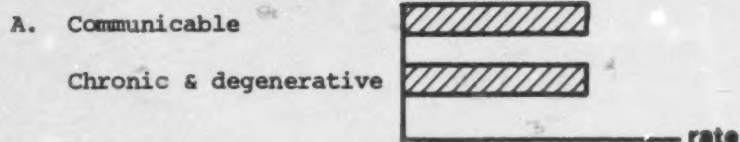
- ___ Cancer
- ___ Heart disease
- ___ Diseases of early infancy
- ___ Diabetes mellitus
- ___ Accidents
- ___ Arteriosclerosis
- ___ Suicide
- ___ Emphysema
- ___ Influenza and pneumonia
- ___ Congenital malformations
- ___ Cirrhosis of the liver
- ___ Stroke

2. From the ten leading causes of death in the United States, list those that are chronic or degenerative in nature and those that are communicable in nature.

Chronic & Degenerative

Communicable

3. In each of the bar graphs below, one bar represents the death rate in the United States due to all chronic and degenerative diseases and the other the death rate due to communicable diseases. Based upon trends evident from 1910 to 1970, which graph would most likely represent 1985?



4. In the list below, order the eight causes of disability in the United States according to frequency. Use number 1 for the most frequent and number 10 for the least frequent.

☐ Heart conditions
☐ Paralysis, complete or partial
☐ Visual impairments
☐ Mental and nervous conditions
☐ Impairments of back or spine
☐ Hypertension without heart involvement
☐ Asthma - hay fever
☐ Arthritis and rheumatism

5. In the list of communicable diseases below, place a check by those that cannot be readily controlled by immunizations.

☐ Poliomyelitis	☐ Typhoid fever
☐ Smallpox	☐ Venereal disease
☐ Impetigo	☐ Diphtheria
☐ Leprosy	☐ Ringworm
☐ Malaria	☐ Influenza
☐ Measles	☐ Viral hepatitis
☐ Tetanus	☐ Mumps
☐ Bacillary dysentery	☐ Pertussis
☐ Histoplasmosis	☐ Streptococcal infections
☐ Chicken pox	
☐ Pneumococcal pneumonia	
☐ Meningitis	

6. (a) List one behavioral habit that has been associated with heart disease, cancer, and chronic obstructive pulmonary disease.
- (b) What precaution will often result in the early detection of chronic conditions and thus help to delay much of the disability that accompanies them?

6. (c) What habit improves muscle tone, retards the development of chronic conditions such as diabetes and heart disease, and helps organs to function properly?
- (d) Name one health habit which has proved to be very effective in maintaining a well-functioning heart, making people less accident-prone, and delaying the onset of arthritis.
- (e) What health habit, if developed early and maintained throughout a lifetime, seems to aid in the handling of leisure time more effectively, helps to maintain a good mental outlook, and helps to avoid depression later in life?
- (f) What kind of habits are able to help people to avoid bodily damage from all forms of accidents?

POST-TEST KEY

1. 2 Cancer
1 Heart disease
6 Diseases of early infancy
8 Diabetes mellitus
4 Accidents
7 Arteriosclerosis
10 Suicide
Emphysema
5 Influenza and pneumonia
Congenital malformations
9 Cirrhosis of the liver
3 Stroke

(2 errors allowed)

2. Chronic & Degenerative

Heart disease
 Cancer
 Stroke
 Arteriosclerosis
 Diabetes
 Cirrhosis of the liver

Communicable

Influenza and pneumonia
 Diseases of early infancy

(No errors allowed)

3. C

4. 1 Heart conditions
4 Paralysis
3 Visual impairments
5 Mental and nervous conditions
6 Impairments of back or spine
7 Hypertension without heart involvement
8 Asthma - hay fever
2 Arthritis and rheumatism

(1 error allowed)

- | | |
|---------------------------------|-----------------------------------|
| 5. <u> </u> Poliomyelitis | <u> </u> Typhoid fever |
| <u> </u> Small pox | <u>x</u> Venereal disease |
| <u>x</u> Impetigo | <u> </u> Diphtheria |
| <u>x</u> Leprosy | <u>x</u> Ringworm |
| <u>x</u> Malaria | <u> </u> Influenza |
| <u> </u> Measles | <u>x</u> Viral hepatitis |
| <u> </u> Tetanus | <u> </u> Mumps |
| <u>x</u> Bacillary dysentery | <u> </u> Pertussis |
| <u>x</u> Histoplasmosis | <u>x</u> Streptococcal infections |
| <u>x</u> Chicken pox | |
| <u>x</u> Pneumococcal pneumonia | |
| <u>x</u> Meningitis | |

(2 errors allowed)

6. (a) Smoking cigarettes
 (b) Periodic physical examinations
 (c) Exercise
 (d) Rest, relaxation, or sleep
 (e) Interesting hobbies
 (f) Safety

(1 error allowed)

HISTORICAL DEVELOPMENT OF PREVENTATIVE MEDICINE AND PUBLIC HEALTH

Unit Two

INTRODUCTION

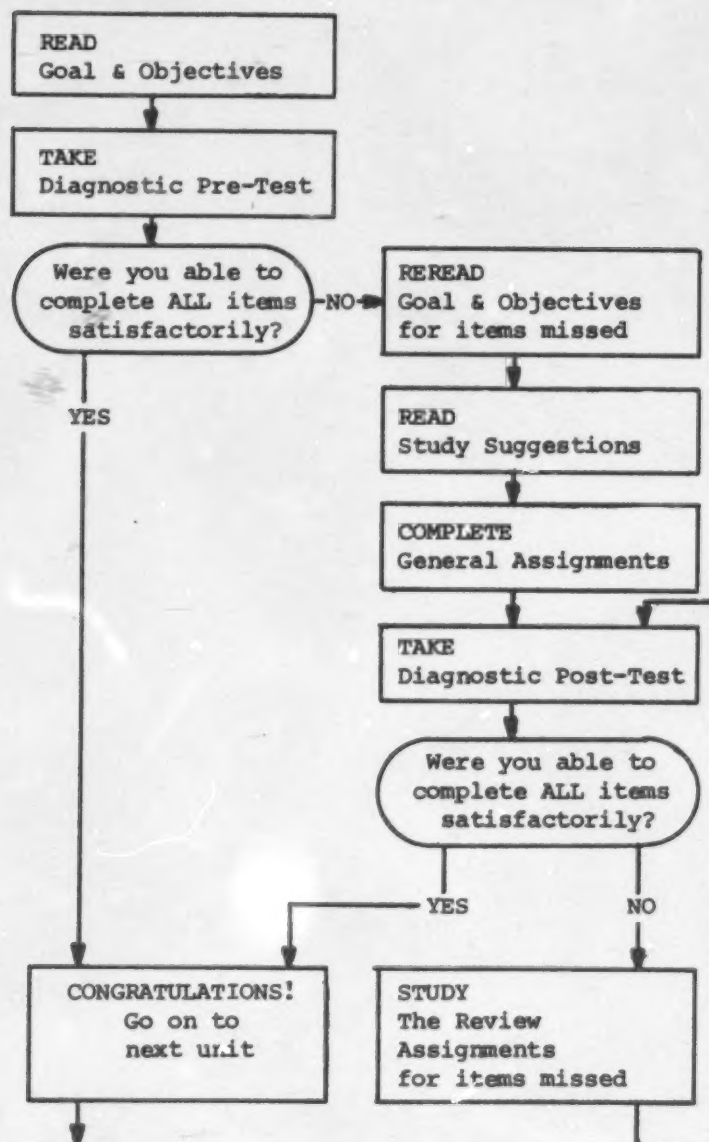
Community health has its roots in preventative medicine and public health. In order to understand modern concepts of community health, you should study the evolutionary development of preventative medicine and public health.

Man has always been interested in his health. However, it has only been in the last one hundred years that there have been organized efforts to maintain good community health practices. If we look back in the annals of history, we find that the status of community health at any point in time is related to the interaction of three basic phenomena. These three phenomena are (1) the nature and severity of disease, (2) the theories concerning the cause of disease and the practices regarding control and treatment, and (3) the prevailing beliefs or social ideologies.

History reflects that over the centuries, the kinds of diseases that have plagued mankind have changed, as has the strength of their impact on the population. Also, the mobility of populations today has complicated many public health problems. It is apparent that the underlying beliefs or ideologies of people in the areas of theological, economic, political, and social relations have determined the attention given to community health problems.

Community or public health has always reflected the level of development of society at any point in time. Medical and community health practices have always been the result of the state of medical knowledge, health facilities, and available skilled manpower. From a historical perspective, this is a continuous process extending from the past to the present and continuing into the future.

STUDY MAP



GOAL

Know the history of health care, the changes in our way of life that have affected the recent history of health care, and the general agencies and services available today.

OBJECTIVES

1. Given a list of names of persons who have made contributions to medicine and a list of contributions, you will match names with contributions.
2. Given a list of specific health agencies, you will classify each as private, public, or voluntary.
3. You will match the five major types of programs provided by community health agencies with appropriate services.
4. You will list seven changes in our way of life, health problems, and medical care practices which affect health needs and programs today.

DIAGNOSTIC PRE-TEST

1. Match the list of names below with the contribution each person made to medicine. Write the number of the contribution opposite the appropriate name.

___ Hammurabi	1. Known as Father of Human Anatomy
___ Galen	2. Observed microscopic life
___ Avicenna	3. Codified laws including medical ethics
___ Andreas Vesalius	4. Perfected polio vaccine
___ Antony van Leeuwenhoek	5. Developed treatment for scurvy
___ James Lind	6. Wrote medical textbook, <u>Canon</u>
___ Ignaz Semmelweis	7. Discovered DDT
___ Othmar Zeidler	8. Advocated disinfection of hands to avoid puerperal septicemia
___ Jonas Salk	9. Believed diseases developed from seeds
___ Wilhelm Roentgen	10. Discovered X-rays
	11. Wrote book on symptoms and treatment of disease
	12. Described circulatory system

2. Match the list of names below with the contribution each person made to medicine. Write the number of the contribution opposite the appropriate name.

___ Imhotep	1. Made surgery a duty of physicians
___ Romans	2. Discovered penicillin
___ Rhazes	3. Discovered radium
___ Paracelsus	4. Believed diseases develop from seeds
___ Ambrose Paré	5. Practiced sanitary engineering
___ Antoine Lavoisier	6. Proved germ theory of disease
___ Louis Pasteur	7. Wrote medical encyclopedia, <u>Continens</u>
___ Robert Koch	8. Quarantined ships
___ Marie Curie	9. Investigated respiratory system
___ Alexander Fleming	10. Egyptian God of Healing
	11. Discovered tubercle bacillus
	12. Created Hippocratic Oath

3. Match the list of names below with the contribution each person made to medicine. Write the number of the contribution opposite the appropriate name.

___ Hippocrates	1. Described circulatory system
___ Venice	2. Developed small pox vaccine
___ Thomas Aquinas	3. Created Hippocratic Oath
___ William Harvey	4. Proved yellow fever transmitted by mosquito
___ Thomas Sydenham	5. Emphasized observation of patient
___ Edward Jenner	6. Perfected polio vaccine
___ Joseph Lister	7. Discovered penicillin
___ Walter Reed	8. Applied antisepsis to practice of surgery
___ Alexander Fleming	9. Quarantined ships
___ Albert B. Sabin	10. Codified laws including medical ethics
	11. Helped people to see value of scientific knowledge
	12. Known as Father of Human Anatomy

4. In the list of health agencies below, indicate which are (1) private, (2) official, or (3) voluntary. Place the appropriate number (1, 2, or 3) opposite the name.

☐ Bureaus of Public Assistance
☐ American Heart Association
☐ Drugstore
☐ Medical clinic (owned by a group of three doctors)
☐ State hospital
☐ Salvation Army

5. Match the list of health services below with the types of programs provided by community health agencies. Place the number of the health service opposite the appropriate program.

<u>Programs</u>	<u>Services</u>
☐ Programs that promote healthful living	1. School health education
☐ Programs for the prevention of health disabilities	2. Gives answers to unsolved problems
☐ Programs that rehabilitate those with handicaps	3. Occupational therapy
☐ Programs of evaluation and research	4. Hospitals
☐ Programs that correct remedial defects and treat illness	5. Maintaining a healthful environment

6. List seven changes in our way of life, health problems, or medical care practices which affect health needs and programs today.

(a)

(b)

(c)

(d)

(e)

(f)

(g)

PRE-TEST KEY

1. 3 Hammurabi
11 Galen
6 Avicenna
1 Andreas Vesalius
2 Antony van Leeuwenhoek
5 James Lind
8 Ignaz Semmelweis
7 Othmar Zeidler
4 Jonas Salk
10 Wilhelm Roentgen

(1 error allowed)

2. 10 Imhotep
5 Romans
7 Rhazes
4 Paracelsus
1 Ambrose Paré
9 Antoine Lavoisier
6 Louis Pasteur
11 Robert Koch
3 Marie Curie
2 Alexander Fleming

(1 error allowed)

3. 3 Hippocrates
9 Venice
11 Thomas Aquinas
1 William Harvey
5 Thomas Sydenham
2 Edward Jenner
8 Joseph Lister
4 Walter Reed
7 Alexander Fleming
6 Albert B. Sabin

(1 error allowed)

4. 2 Bureaus of Public Assistance
 3 American Heart Association
 1 Drugstore
 1 Medical clinic
 2 State hospital
 3 Salvation Army

(1 error allowed)

5. 1 Programs that promote healthful living
 5 Programs for the prevention of health disabilities
 3 Programs that rehabilitate those with handicaps
 2 Programs of evaluation and research
 4 Programs that correct remedial defects and treat illness

(1 error allowed)

6. (a) People are suffering more from chronic and degenerative diseases today than from communicable diseases.
- (b) Larger population
- (c) Changes in the percentages of individuals in specific age groups (more children and more adults age 65 years or older)
- (d) More mobility, movement from rural to urban and suburban areas
- (e) Greater proportion of income spent on medical care
- (f) Time lapse in discovery of new medical knowledge before it is put to practice in medical care
- (g) Availability of health services and facilities
- (h) More health personnel
- (i) Fragmentation of health care

(Any 7 of the above 9 answers)

STUDY SUGGESTIONS

Objectives 1 and 4 require you to memorize some material. Here again you should use the procedures outlined for you in the Study Map.

Objective 2 requires you to understand the types of health services that are available. These types are private, public, and voluntary. Your understanding will be tested by giving you a list of organizations such as the American Cancer Society, a drugstore, etc. You will be asked to indicate whether each of these is a private, public, or voluntary service. Keep in mind that the organizations listed on the Diagnostic Post-Test are not the same as those listed on the Credit Exam. In your study, therefore, try to understand the general characteristic of each type of service.

Objective 3 requires you to understand the types of programs offered by health services. Your understanding will be tested in the same way as for objective 2.

ASSIGNMENTS

General

TEXTBOOK:

Chapter 1 (review)
Chapter 2

Review

TEST ITEM MISSED

STUDY

1-3	Textbook, pages 31-43
4	Textbook, page 5
5	Textbook, pages 4-5
6	Textbook, pages 7-22

DIAGNOSTIC POST-TEST

1. Match the list of names below with the contribution each person made to medicine. Write the number of the contribution opposite the appropriate name.

___ Antony van Leeuwenhoek	1. Wrote book on symptoms and treatment of disease
___ Othmar Zeidler	2. Wrote medical textbook, <u>Canon</u>
___ Avicenna	3. Known as Father of Human Anatomy
___ Hammurabi	4. Advocated disinfection of hands to avoid puerperal septicemia
___ Jonas Salk	5. Developed treatment for scurvy
___ James Lind	6. Believed diseases developed from seeds
___ Wilhelm Roentgen	7. Codified laws including medical ethics
___ Ignaz Semmelweis	8. Observed microscopic life
___ Andreas Vesalius	9. Discovered X-rays
___ Galen	10. Described circulatory system
	11. Discovered DDT
	12. Perfected polio vaccine

2. Match the list of names below with the contribution each person made to medicine. Write the number of the contribution opposite the appropriate name.

___ Louis Pasteur	1. Discovered tubercle bacillus
___ Paracelsus	2. Described respiratory system
___ Alexander Fleming	3. Quarantined ships
___ Imhotep	4. Proved germ theory of disease
___ Antoine Lavoisier	5. Discovered radium
___ Robert Koch	6. Made surgery a duty of physicians
___ Ambrose Paré	7. Practiced sanitary engineering
___ Romans	8. Created Hippocratic Oath
___ Marie Curie	9. Egyptian God of Healing
___ Rhazes	10. Discovered penicillin
	11. Believed diseases developed from seeds
	12. Wrote medical encyclopedia, <u>Continens</u>

3. Match the list of names below with the contribution they made to medicine. Write the number of the contribution opposite the name.

___ Thomas Sydenham	1. Perfected polio vaccine
___ Alexander Fleming	2. Proved yellow fever transmitted by mosquito
___ Joseph Lister	3. Quarantined ships
___ Hippocrates	4. Applied antisepsis to practice of surgery
___ Walter Reed	5. Known as Father of Human Anatomy
___ Thomas Aquinas	6. Discovered penicillin
___ Albert B. Sabin	7. Emphasized observation of patient
___ Edward Jenner	8. Described circulatory system
___ Venice	9. Created Hippocratic Oath
___ William Harvey	10. Helped people to see value of scientific knowledge
	11. Codified laws including medical ethics
	12. Developed small pox vaccine

4. In the list of health agencies below, indicate which are (1) private, (2) official, or (3) voluntary. Place the appropriate number (1, 2, or 3) opposite each name.

___ Salvation Army
___ Veterinarian's office
___ National Institute of Health
___ Public Health departments
___ Physician's office
___ American Lung Association

5. Match the health services listed below with the types of programs provided by community health agencies. Place the number of the health service opposite the appropriate program.

Services

1. Research facilities
2. Physicians
3. Patient health education
4. Prosthetic devices
5. Well baby clinics

Programs

- ☐ Programs that promote healthful living
- ☐ Programs for the prevention of health disabilities
- ☐ Programs that correct remedial defects and treat illness
- ☐ Programs that rehabilitate those with handicaps
- ☐ Programs of evaluation and research

6. List seven changes in our way of life, health problems, or medical care practices which affect health needs and programs today.

(a)

(b)

(c)

(d)

(e)

(f)

(g)

POST-TEST KEY

1. 8 Antony van Leeuwenhoek
 11 Othmar Zeidler
 2 Avicenna
 7 Hammurabi
 12 Jonas Salk
 5 James Lind
 9 Wilhelm Roentgen
 4 Ignaz Semmelweis
 3 Andreas Vesalius
 1 Galen

(1 error allowed)

2. 4 Louis Pasteur
 11 Paracelsus
 10 Alexander Fleming
 9 Imhotep
 2 Antoine Lavoisier
 1 Robert Koch
 6 Ambrose Paré
 7 Romans
 5 Marie Curie
 12 Rhazes

(1 error allowed)

3. 7 Thomas Sydenham
 6 Alexander Fleming
 4 Joseph Lister
 9 Hippocrates
 2 Walter Reed
 10 Thomas Aquinas
 1 Albert B. Sabin
 12 Edward Jenner
 3 Venice
 8 William Harvey

(1 error allowed)

4. 3 Salvation Army
 1 Veterinarian's office
 2 National Institute of Health
 2 Public Health departments
 1 Physician's office
 3 American Lung Association

(1 error allowed)

5. 3 Programs that promote healthful living
 5 Programs for the prevention of health disabilities
 2 Programs that correct remedial defects and treat illness
 4 Programs that rehabilitate those with handicaps
 1 Programs of evaluation and research

(1 error allowed)

6. (a) More chronic disease than communicable
 (b) Increase in population
 (c) Changes in age groups (more children and adults over 65 years)
 (d) More mobility, movement from rural to urban and urban to suburban
 (e) Greater proportion of income spent on medical care
 (f) Time gap between medical discovery and medical practice
 (g) Availability of health services and facilities
 (h) More health personnel
 (i) Fragmentation of health care

(Any 7 of the above 9)

* * *

ORGANIZATION OF FEDERAL, STATE, AND LOCAL GOVERNMENT AGENCIES

Unit Three

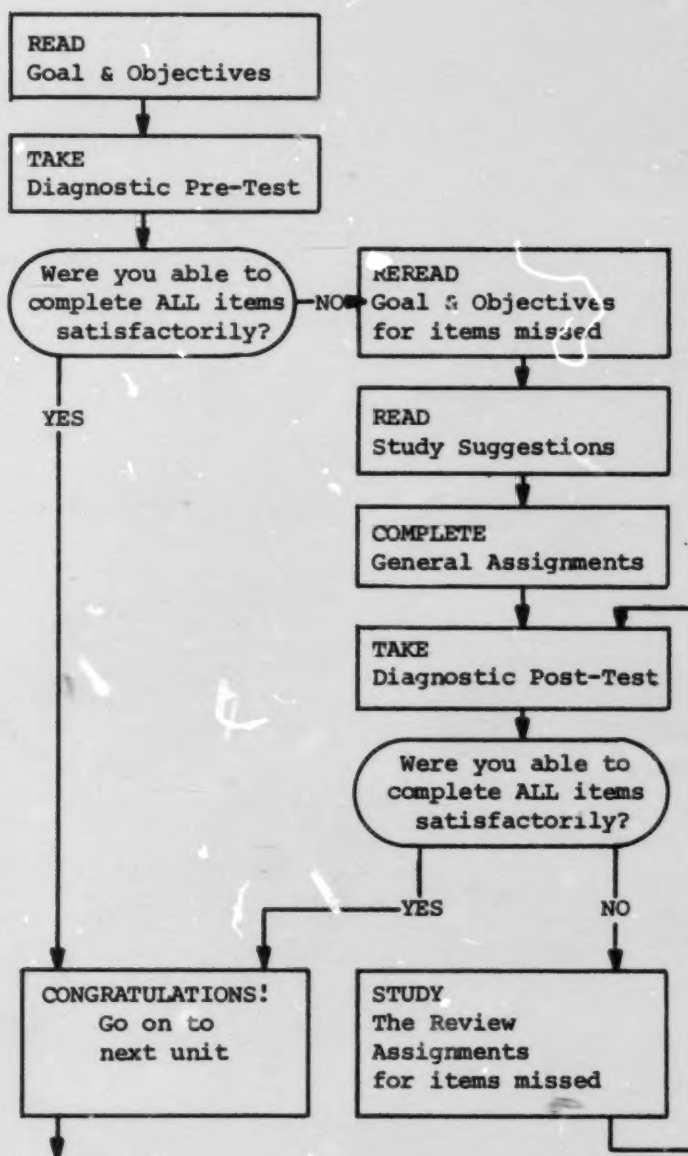
INTRODUCTION

The emphasis in community health programs has shifted from assuring survival to improving the quality of life. We are striving for an optimal level of physical, social, and mental well-being, as well as increased longevity.

Because of the mobility of people in the world today, health has become a global affair. It has become necessary to organize at the international level as well as on the local, state, and federal levels. Long-range representative planning must replace short-term emergency measures if health care is to improve on a worldwide basis.

Because of an increased understanding of the fact that nations, as well as cultural groups, are interrelated, and that no individual or community can survive in isolation, greater efforts are being made toward unified action and the sharing of resources on a worldwide basis. There is a general acknowledgment of the need to promote program development and the organization and administration of health services aimed at meeting the changing health needs of the twentieth century. In planning for the future, we must evaluate what has happened in the past and propose the best possible approaches to organization and administration for healthier communities in the future.

STUDY MAP



GOAL

Become familiar with agencies at the federal, state, and local levels which are engaged in solving health problems.

OBJECTIVES

1. Given a list of functions, you will indicate which are delegated to (1) international agencies and (2) federal, (3) state, or (4) local health departments.
2. You will list the advantages and disadvantages of increasing federal funding to promote and support health programs.
3. You will match specific health programs with the major divisions of the Department of Health, Education, and Welfare which are responsible for the programs.

DIAGNOSTIC PRE-TEST

1. Match the list of functions performed at various levels of government with the appropriate agencies. Place the number of the correct agency level opposite each function.

Agency Level

1. International
2. Federal
3. State
4. Local

Functions

- ___ Takes water samples for testing
- ___ Furnishes vaccines
- ___ Regulates quarantine worldwide
- ___ Sets international standards of nomenclature
- ___ Has legal responsibility for health care of public
- ___ Administers nuisance control program
- ___ Stimulates research programs by providing funds and resources

2. Which of the following is one of the advantages of increased federal funds to promote and support health programs?
 - (a) More federal control - less freedom
 - (b) Unbalanced programs
 - (c) Wealthier communities get most of the funds
 - (d) More and better health services

3. Which of the following is one of the disadvantages of increased federal funds to promote and support health programs?
 - (a) More paper work
 - (b) Fewer and poorer health services
 - (c) Less uniform programs throughout the nation
 - (d) Less money and more coordination of programs
4. Which of the following is one of the advantages of increased federal funds to promote and support health programs?
 - (a) More varied programs throughout the nation
 - (b) More opportunity and security in health programs
 - (c) Less paper work
 - (d) More federal control - less freedom
5. Which of the following is one of the disadvantages of increasing federal funds to promote and support health programs?
 - (a) Sometimes produces unbalanced programs
 - (b) Less federal control - more freedom
 - (c) Less money and less coordination of programs
 - (d) Fewer health services

6. Match major divisions of the Department of Health, Education, and Welfare with the specific health programs for which they are responsible:

- | | |
|--|---|
| ___ Children's Bureau | 1. Consumer Protection and Environmental Health Service |
| ___ National Center for Communicable Disease Assistance Payments | 2. Health Services and Mental Health Administration |
| ___ Bureau of Higher Education | 3. National Institute of Health |
| ___ Air Pollution Control | 4. Social and Rehabilitation Service |
| ___ National Cancer Institute | 5. Social Security Administration |
| ___ National Library of Medicine | 6. Office of Education |
| ___ Food and Drug Administration | |
| ___ National Heart Institute | |
| ___ Bureau of Disability Insurance Rehabilitation Services | |
| ___ National Institute of Mental Health | |
| ___ Environmental Control Administration | |
| ___ Bureau of Education for the Handicapped | |
| ___ Bureau of Retirement and Survivors Insurance | |
| ___ National Center for Health Statistics | |
| ___ Bureau of Elementary and Secondary Education | |

PRE-TEST KEY

1. 4 Takes water samples for testing
3 Furnishes vaccines
1 Regulates quarantine worldwide
1 Sets international standards of nomenclature
3 Has legal responsibility for health care of public
4 Administers nuisance control program
2 Stimulates research programs by providing funds
 and reserves

(1 error allowed)

2. d

3. a

4. b

5. a

(1 error allowed on Questions 2-5)

6. 4 Children's Bureau
2 National Center for Communicable Diseases
4 Assistance Payments
6 Bureau of Higher Education
1 Air Pollution Control
3 National Cancer Institute
3 National Library of Medicine
1 Food and Drug Administration
3 National Heart Institute
5 Bureau of Disability Insurance
4 Rehabilitation Services
2 National Institute of Mental Health
1 Environmental Control Administration
6 Bureau of Education for the Handicapped
5 Bureau of Retirement and Survivors Insurance
2 National Center for Health Statistics
6 Bureau of Elementary and Secondary Education

(2 errors allowed)

STUDY SUGGESTIONS

Objective 1 requires you to learn the functions of (1) international agencies and (2) federal, (3) state, and (4) local health departments. Question 1 on the Diagnostic Post-Test contains a list of functions for you to classify. Keep in mind, however, that these are only a few of many possible examples. The Credit Exam will have the same type of question with different examples for you to classify.

Objectives 2 and 3 require you to memorize some material. The material will be tested in Questions 2-6 on the Diagnostic Post-Test. Use the steps in your Study Map to help you master this material.

ASSIGNMENTS

General

TEXTBOOK:

Chapter 6

SUPPLEMENTAL READINGS:

Advantages and Disadvantages of Federal Funding,
page 3

Review

TEST ITEM MISSED

STUDY

- | | |
|---------------|---|
| 1 | Textbook, pages 153-197, (especially 154-155, 158-159, 184) |
| 2-5 | Supplemental reading, paragraphs 1-3 |
| 6 | Textbook, pages 160-161 |

DIAGNOSTIC POST-TEST

1. Match the list of functions performed at various levels of government with the appropriate agencies. Place the number of the correct agency level opposite each function.

Agency Level

1. International
2. Federal
3. State
4. Local

Functions

- ___ Delegates responsibility to local level
- ___ Provides advisory and consultative services
- ___ Uses police powers when necessary
- ___ Formulates policies and standards for cooperation between states
- ___ Responsible for protecting and advancing the nation's health
- ___ Proposes controls to regulate dependency-producing drugs
- ___ Concerned with international health programs
- ___ Inspects restaurants

2. Which of the following is one of the advantages of increased federal funds to promote and support health programs?
 - (a) More varied programs throughout the nation
 - (b) Better trained health personnel
 - (c) Less paper work
 - (d) More federal control - less freedom

3. Which of the following is one of the disadvantages of increased federal funds to promote and support health programs?
 - (a) More paper work
 - (b) Fewer health services
 - (c) Grants are based on population
 - (d) Poor communities receive a disproportionate amount of aid
4. Which of the following is one of the advantages of increased federal funds to promote and support health programs?
 - (a) More federal control - less freedom
 - (b) More money and more coordination of programs
 - (c) More local initiative
 - (d) Less paper work
5. Which of the following is one of the disadvantages of increasing federal funds to promote and support health programs?
 - (a) Fewer health programs
 - (b) More federal control - less freedom
 - (c) Less coordination of programs
 - (d) Less opportunity and security in health programs

6. Match major divisions of the Department of Health, Education, and Welfare with the specific health programs for which they are responsible:

- | | |
|--|---|
| ___ National Library of Medicine | 1. Social Security Administration |
| ___ National Cancer Institute | 2. National Institute of Health |
| ___ Bureau of Higher Education | 3. Health Services and Mental Health Administration |
| ___ Bureau of Education for the Handicapped | 4. Social and Rehabilitation Service |
| ___ Children's Bureau | 5. Office of Education |
| ___ Bureau of Elementary and Secondary Education | 6. Consumer Protection and Environmental Health Service |
| ___ Bureau of Retirement and Survivors Insurance | |
| ___ Air Pollution Control | |
| ___ Food and Drug Administration | |
| ___ National Institute of Mental Health | |
| ___ National Center for Communicable Disease | |
| ___ Medicare and Medicaid | |
| ___ Environmental Control Administration | |
| ___ Assistance Payments | |
| ___ National Center for Health Statistics | |
| ___ Rehabilitation Services | |

POST-TEST KEY

1. 3 Delegates responsibility to local level
3 Provides advisory and consultative services
4 Use police powers when necessary
2 Formulates policies and standards of . . .
2 Responsible for protecting and financing . . .
1 Proposes controls to regulate dependency . . .
1 Concerned with international health programs
4 Inspects restaurants

(2 errors allowed)

2. b

3. a

4. b

5. b

(1 error allowed on Questions 2 - 5)

6. 2 National Library of Medicine
 2 National Cancer Institute
 5 Bureau of Higher Education
 5 Bureau of Education for the Handicapped
 4 Children's Bureau
 5 Bureau of Elementary and Secondary Education
 1 Bureau of Retirement and Survivors Insurance
 6 Air Pollution Control
 6 Food and Drug Administration
 3 National Institute of Mental Health
 3 National Center for Communicable Disease
 1 Medicare and Medicaid
 6 Environmental Control Administration
 4 Assistance Payments
 3 National Center for Health Statistics
 4 Rehabilitation Services

(2 errors allowed)

THE LOCAL HEALTH DEPARTMENT

Unit Four

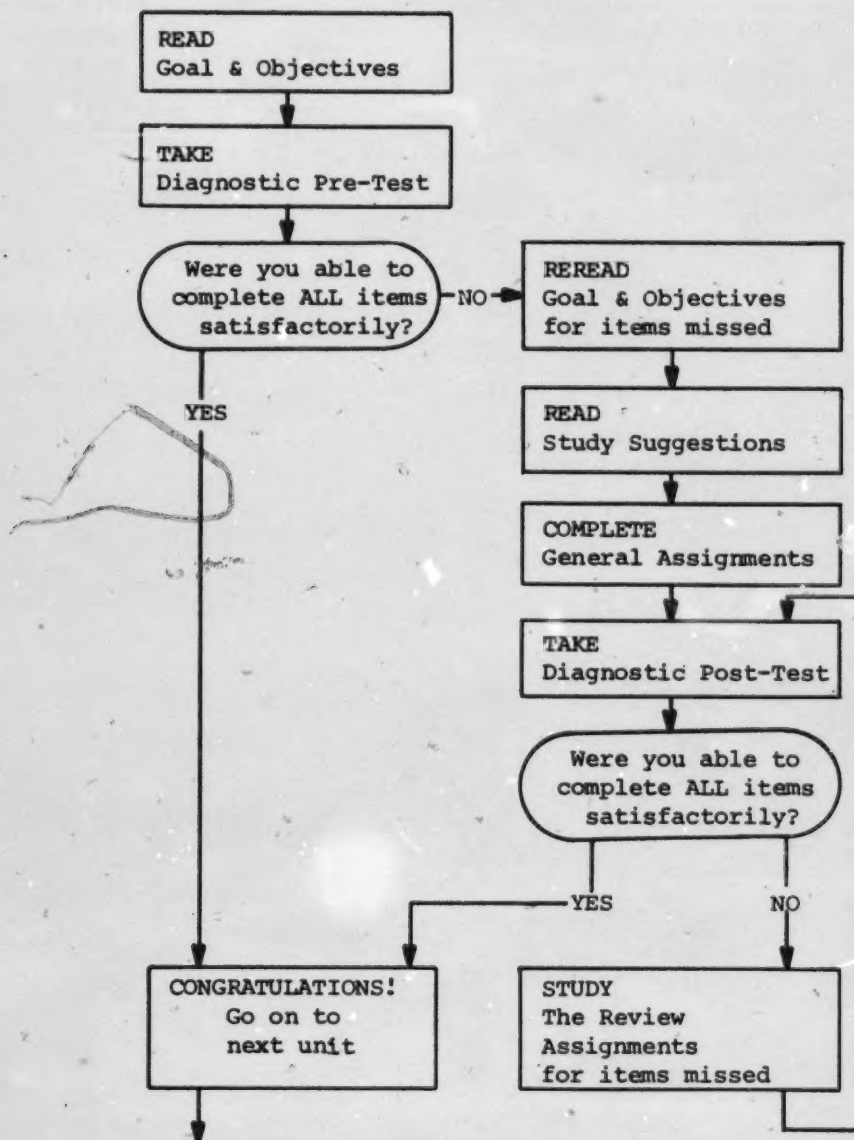
INTRODUCTION

The local public health department is the official agency with the primary responsibility for basic community health programs. Although the state is legally responsible for the public's health, most of its powers are delegated to local health departments. It is on the basis of the authority delegated by the state that local health departments adopt ordinances, as well as the supplementary rules and regulations which they enforce.

Because of health problems which span local boundaries, in recent years it has become more and more common for regional health departments to function rather than county or city health departments. This regional organization has provided impetus for more effective programs both quantitatively and qualitatively in meeting the health needs of communities.

Local health departments maintain professional staffs. A medical officer usually is the administrator, directing a staff of trained nurses, sanitarians, and health educators. The staffs of larger health departments may include social workers as well as psychologists and biostatisticians. All of these people are professionally trained as public health workers. Other community health agencies form a complex network which provides a variety of health services and requires many different kinds of professional and technical personnel. The health professions are one of the fastest growing occupational groupings of the last decade. Professionals and technicians are needed in almost every area of the health services.

STUDY MAP



GOAL

Understand the role of the local health department in promoting, protecting, and controlling the health of the community.

OBJECTIVES

1. Given descriptions of situations that are of concern to the local health department, you will indicate which division (nursing, sanitation, or public health education) should act in each situation.
2. Given a set of terms, problems, and situations, some of which come under the following programs: (1) vital and health statistics, (2) environmental health, (3) communicable disease control, (4) maternal and child health, (5) chronic disease control in adult health, (6) laboratory services, and (7) health education; and some of which do not fall under the auspices of the local health department, you will identify which program has responsibility for each situation.
3. You will list the primary purpose of all health education and the three methods for accomplishing this purpose.

DIAGNOSTIC PRE-TEST

1. In the situations listed below, indicate which division of a public health department would deal with the problem by placing an N for nursing, an S for sanitation, or a P for public health education, opposite each situation.
 - ___ Residents in a neighborhood complained that one of their members is letting garbage pile up in the back yard and the resulting smell and general appearance are offensive.
 - ___ A person calls and asks that his soil be tested to determine if he can use a septic tank with a new home he plans to build.
 - ___ Someone calls to report that a family is not feeding or clothing their children properly.
 - ___ Setting up a community drug council
 - ___ Developing a brochure on family planning
2. Match the seven basic functions of a health department listed below with the terms, problems, and situations listed on the next page. Place the number of the basic function opposite the appropriate term, problem, or situation. If some of the terms are inappropriate, leave them blank.

Basic Functions

1. Vital and health statistics
2. Environmental health
3. Communicable disease control
4. Maternal and child health
5. Chronic disease and adult health
6. Laboratory services
7. Health education

Terms, Problems, Situations

- ___ Tissue inspection for cancer
- ___ Mental illness
- ___ Distribution of health information
- ___ Pre-school screening examinations
- ___ Measles
- ___ Food sanitation
- ___ Vector control
- ___ Case register
- ___ Thermal pollution
- ___ Maintain film library
- ___ Preparation of pamphlets
- ___ Emphysema
- ___ Blood test for syphilis
- ___ Mortality

3. Describe the purpose of all health education and list the three methods employed to accomplish this purpose.

Purpose:

Methods:

(a)

(b)

(c)

PRE-TEST KEY

1. S Residents in a neighborhood . . .
S A person calls . . .
N Someone calls to report . . .
P Setting up a community drug council
P Developing a brochure on family planning

(1 error allowed)

2. 6 Tissue inspection for cancer
5 Mental illness
7 Distribution of health information
4 Pre-school screening examinations
3 Measles
2 Food sanitation
2 Vector control
1 Case register
2 Thermal pollution
7 Maintain film library
7 Preparation of pamphlets
5 Emphysema
6 Blood test for syphilis
1 Mortality

(4 errors allowed)

3. Purpose: To get people to accept the responsibility for their own health
Methods: (a) By making health a value in life
 (b) By teaching them to carry out activities individually and in groups which will help them to realize good health
 (c) By promoting the development of health facilities and services and informing the public how and when to use them

STUDY SUGGESTIONS

Objective 1 requires you to become familiar with the three divisions of the local public health program. These are nursing, sanitation, and public health education. Your understanding of these divisions will be tested by giving you situations and asking you to indicate which division would act in the situation (see Question 1 on the Diagnostic Post-Test). The situations given on the Credit Exam will be different from those on the Diagnostic Post-Test, so as you study, try to understand the general responsibilities of each division so that you are able to recognize these responsibilities when you encounter them in new situations.

Objective 2 requires you to understand the seven basic functions of the local health department. Your understanding of this material will be tested in the same way as for Objective 1. The situations presented on the Credit Exam will differ from those on the Diagnostic Post-Test. Study for it in the same manner as you would study for Objective 1.

Objective 3 requires you to memorize the purpose of health education and the methods for accomplishing that purpose. When you think you have mastered it, try the Diagnostic Post-Test as a check. The question on the Credit Exam will be identical to this one (Question 3) on the Diagnostic Post-Test.

ASSIGNMENTS

General

TEXTBOOK:

Chapter 7

SUPPLEMENTAL READINGS:

Health Education, page 5

Review

TEST ITEM MISSED

STUDY

- | | |
|-------------|---|
| 1 | Textbook, pages 238-239 |
| 2 | Textbook, pages 201-232 |
| 3 | Supplemental reading,
paragraphs 1-2 |

DIAGNOSTIC POST-TEST

1. In the situations listed below indicate which division of a public health department would deal with the problem by placing an N for nursing, an S for sanitation, or a P for public health education opposite each situation.

- Residents in a neighborhood complain that a nearby industry is emitting offensive pollutants into the air in the form of smoke and unpleasant odors.
- Supervision for a mother on how to care for her newborn infant
- A school official calls and asks that someone come to the school and inspect the children for head lice.
- Developing a brochure on family planning
- Writing news releases about the importance of getting immunizations on a future clinic date
- Inspection of a dairy for cleanliness and proper pasteurization of milk

2. Match the terms, problems, and situations on the left with the seven basic functions of a health department on the right. Indicate which of the seven basic functions each of the terms, problems, or situations refers to by placing the number of the basic function opposite the appropriate term, problem, or situation. If some of the terms are inappropriate, leave them blank.

<u>Terms, Problems, Situations</u>	<u>Basic Functions</u>
___ Counseling mothers about nutrition	1. Vital and health statistics
___ Sewage treatment	2. Environmental health
___ Alcoholism	3. Communicable disease control
___ Provision of teaching aids	4. Maternal and child health
___ Food poisoning	5. Chronic disease and adult health
___ Marriage - divorce records	6. Laboratory services
___ Cancer detection	7. Health education
___ Active immunity	
___ Normal birth	
___ Parasite control	
___ Supervision of private laboratories	
___ Consultation service to private physicians	
___ Evaluates educational materials	
___ Records of birth	

3. Describe the purpose of all health education and list the three methods employed to accomplish this purpose.

Purpose:

Methods:

(a)

(b)

(c)

POST-TEST KEY

1. S Residents in a neighborhood
N Supervision for a mother
N A school official calls
P Developing a brochure
P Writing news releases
S Inspection of a dairy

(1 error allowed)

2. 4 Counseling mothers about nutrition
2 Sewage treatment
5 Alcoholism
7 Provision of teaching aids
2 Food poisoning
1 Marriage - divorce records
6 Cancer detection
3 Active immunity
4 Normal birth
2 Parasite control
6 Supervision of private laboratories
6 Consultation service to private physicians
7 Evaluates educational materials
1 Records of birth

(4 errors allowed)

3. Purpose: To get people to accept the responsibility for their own health

Methods: (a) By making health a value in life

(b) By teaching them to carry out activities individually and in groups which will help them to realize good health

(c) By promoting the development of health facilities and services and informing the public how and when to use them

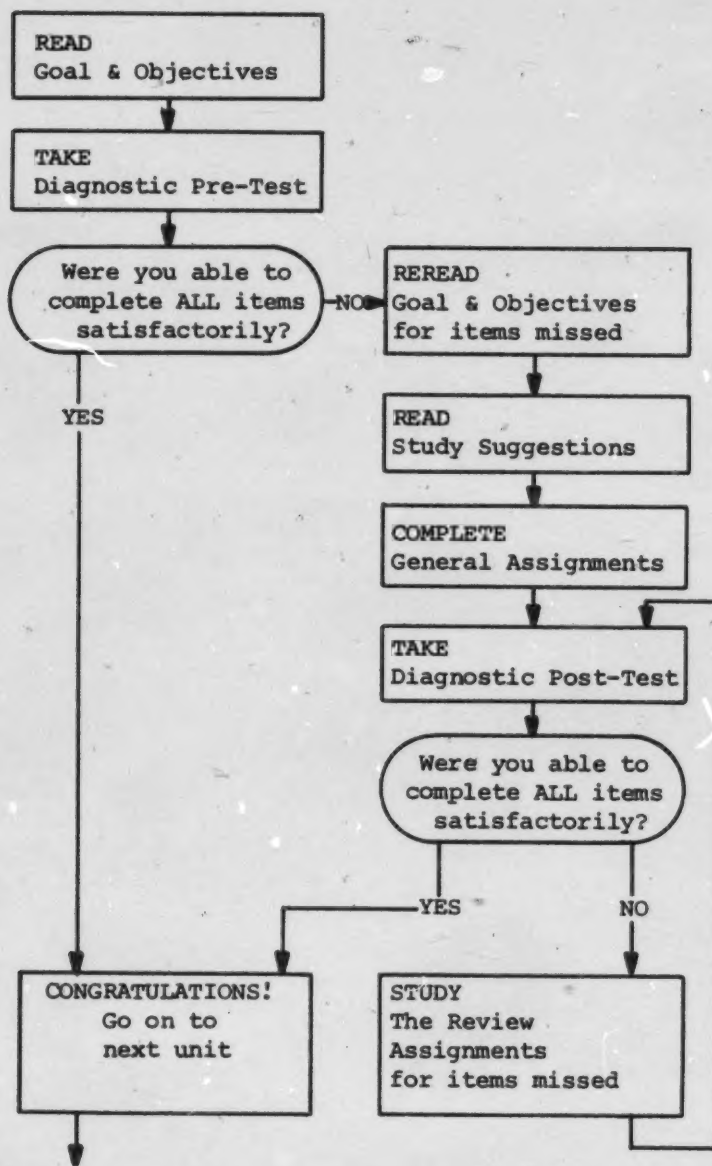
* * *

THE TOOLS OF PUBLIC HEALTH**Unit Five****INTRODUCTION**

To be effective, public and community health programs must be related to the health needs of the population. Population characteristics and health data, referred to as the tools of public health, help to describe the health needs of a community. Demographic data describes the population (age, sex, race, and marital status of each individual). This information is gathered every ten years by the Bureau of Census. In addition to this information, vital statistics and morbidity data are used in planning and evaluating public health programs. Vital statistics refer to the vital events of birth, death, marriage, and divorce. Morbidity data refers to illness. This information is gathered from official registration records kept by the Department of Public Health.

Because of the importance of demographic and vital event data for establishing and evaluating public and community health programs, it is essential that students of community health become familiar with the types of information included in demographic data and vital statistics, and how the information is collected.

STUDY MAP



GOAL

Understand the components of demographic data and vital statistics and their usefulness in planning and evaluating public health programs.

OBJECTIVES

1. Given a set of items consisting of demographic data and vital statistics, you will indicate which information is obtained in the census and which is compiled as vital statistics.
2. You will indicate the level (county, state, or federal) of government which is responsible for the collection of census information, vital statistics, and health statistics.
3. You will be able to indicate statistical procedures which exclusively describe demographic data (population), those which describe vital events, and those which describe morbidity data.
4. You will list the three primary reasons for compiling health statistics.

DIAGNOSTIC PRE-TEST

1. Match the terms related to demographic data and vital statistics by source. Place the number of the source opposite each term.

<u>Terms</u>	<u>Source</u>
☐ Deaths	1. Census
☐ Condition of housing	2. Vital statistics
☐ Age groups	3. Morbidity data
☐ Income	
☐ Population	
☐ Divorces	
☐ Sex	
☐ Race	
☐ Births	
☐ Illness	
☐ Education	
☐ Occupation	
☐ Length of stay in residence	

2. Place the number of the appropriate level of government opposite each responsibility for collecting or compiling data. If a level of government is not appropriate, do not use it.

Government

1. County
2. State
3. Federal

Responsibility

- ☐ Primary responsibility for the taking of the census every ten years
- ☐ Responsibility for the collection of vital statistics
- ☐ Responsibility for compiling and analyzing statistics for a wide range of health areas

3. In the statistical procedures listed below, place a D by those which exclusively describe demographic data (population), a V by those which describe vital events, and a M by those which describe morbidity data.

☐ Prevalence rate
☐ Sex ratio
☐ Crude death rate
☐ Crude birth rate
☐ Dependency ratio
☐ Age distribution
☐ Incidence rate
☐ Infant mortality rate
☐ Child-woman ratio

4. List the three primary reasons for compiling health statistics.

(a)

(b)

(c)

PRE-TEST KEY

1. 2 Deaths
 - 1 Condition of housing
 - 1 Age groups
 - 1 Income
 - 1 Population
 - 2 Divorces
 - 1 Sex
 - 1 Race
 - 2 Births
 - 3 Illness
 - 1 Education
 - 1 Occupation
 - 1 Length of stay in residence

(1 error allowed)

2. 3 Primary responsibility for the taking of the census every ten years
 - 1 Responsibility for the collection of vital statistics
 - 3 Responsibility for compiling and analyzing statistics for a wide range of health areas

(no errors allowed)

3. M Prevalence rate
 - D Sex ratio
 - V Crude death rate
 - V Crude birth rate
 - D Dependency ratio
 - D Age distribution
 - M Incidence rate
 - V Infant mortality rate
 - D Child-woman ratio

(1 error allowed)

4. (a) To provide a comprehensive picture of the nature and magnitude of the nation's health problems
- (b) To assess how well health services are meeting these problems, at what cost, and with what gain
- (c) To serve basic health research needs

(no errors allowed)

STUDY SUGGESTIONS

Objectives 1, 2, 3, and 4 of this unit each require you to memorize information well enough that you can recall it on a test. For this unit especially, you will want to reread the Goal and Objectives and follow the steps outlined in your Study Map until you can pass the Diagnostic Post-Test.

ASSIGNMENTS

General

SUPPLEMENTAL READINGS:

Demographic Data and Vital Events, page 7

REPRINT:

Health Statistics Today and Tomorrow, page 9Review

TEST ITEM MISSED

STUDY

- | | |
|-------------|--|
| 1 | Supplemental reading,
paragraphs 1-2 |
| 2 | Supplemental reading,
paragraphs 1-2, 6 |
| 3 | Supplemental reading,
paragraphs 3-5 |
| 4 | Supplemental reading,
paragraph 6 |

DIAGNOSTIC POST-TEST

1. Match the terms related to demographic data and vital statistics by source. Place the number of the source opposite each term.

<u>Terms</u>	<u>Source</u>
___ Length of stay in residence	1. Census
___ Education	2. Vital statistics
___ Race	3. Morbidity data
___ Income	
___ Deaths	
___ Sex	
___ Illness	
___ Condition of housing	
___ Births	
___ Occupation	
___ Population	
___ Age groups	
___ Divorces	

2. Place the number of the appropriate level of government opposite each responsibility for collecting or compiling data. If a level of government is not appropriate, do not use it.

Government

1. County
2. State
3. Federal

Responsibility

- ___ Primary responsibility for the taking of the census every ten years
- ___ Responsibility for the collection of vital statistics
- ___ Responsibility for compiling and analyzing statistics for a wide range of health areas

3. In the statistical procedures listed below, place a D by those that exclusively describe demographic data (population), a V by those that describe vital events, and a M by those that describe morbidity data.

☐ Dependency ratio
☐ Crude death rate
☐ Incidence rate
☐ Child-woman ratio
☐ Prevalence rate
☐ Infant mortality rate
☐ Age distribution
☐ Crude birth rate

4. List the three primary reasons for compiling health statistics.

(a)

(b)

(c)

POST-TEST KEY

1. 1 Length of stay in residence
1 Education
1 Race
1 Income
2 Deaths
1 Sex
3 Illness
1 Condition of housing
2 Births
1 Occupation
1 Population
1 Age groups
2 Divorces

(1 error allowed)

2. 3 Primary responsibility for the taking of the census every ten years
1 Responsibility for the collection of vital statistics
3 Responsibility for compiling and analyzing statistics for a wide range of health areas

(no errors allowed)

3. D Dependency ratio
V Crude death rate
M Incidence rate
D Child-woman ratio
M Prevalence rate
V Infant mortality rate
D Age distribution
V Crude birth rate

(1 error allowed)

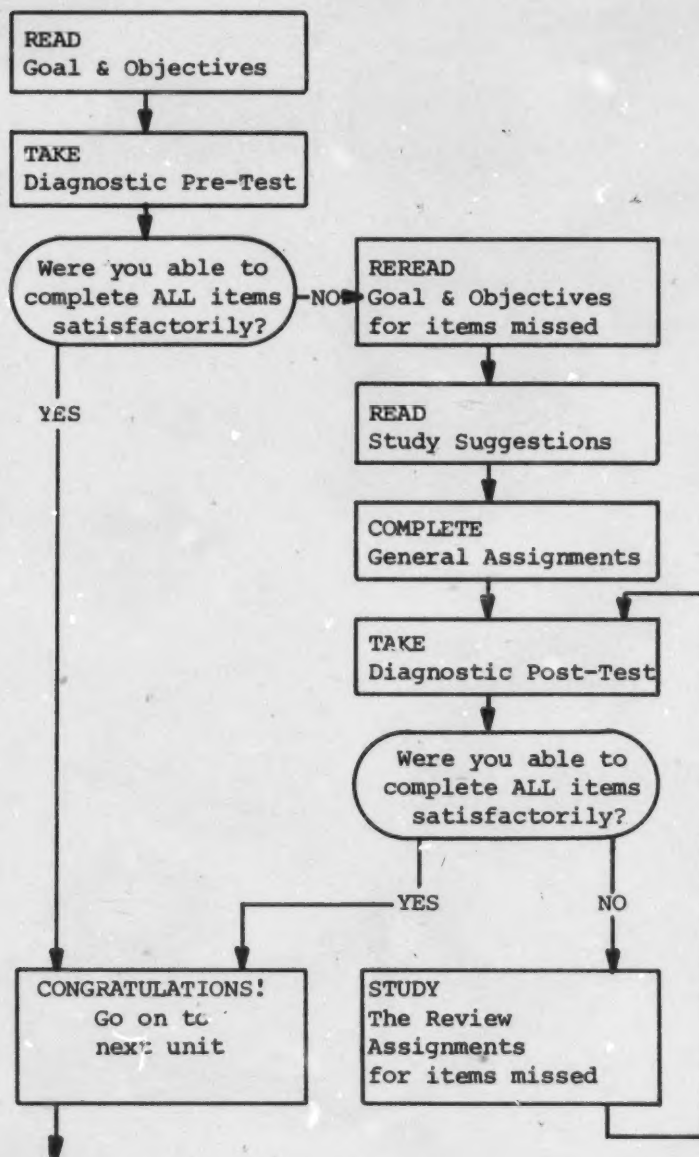
4. (a) To provide a comprehensive picture of the nature and magnitude of the nation's health problems
 - (b) To assess how well health services are meeting these problems, at what cost, and with what gain
 - (c) To serve basic health research needs
- (no errors allowed)

VOLUNTARY HEALTH AGENCIES**Unit Six****INTRODUCTION**

Voluntary agencies play a very vital part in the overall community health programs. They augment and supplement the efforts of official agencies. They are germane to this country, and trace their origins to before the turn of the century. The American Medical Association recognizes over fifty national voluntary health agencies, each of which has state and local affiliates.

Voluntary agencies have no official status and usually work under an independent board of interested citizens. They came into existence because of the desire of people to join together in meeting common health needs of the population. Although voluntary agencies are usually chartered and licensed by some particular state or local government agency, they are only responsible to their members and to public opinion.

STUDY MAP



GOAL

Become familiar with the organization of voluntary agencies and the role they have in maintaining, protecting, and promoting community health.

OBJECTIVES

1. Given a set of means by which funds may be obtained, you will indicate which are commonly used by voluntary agencies.
2. Given a set of programs and activities, you will indicate those that are commonly associated with voluntary agencies.
3. Given a list of descriptive statements, you will indicate which refer to the American Red Cross as a voluntary agency.
4. Given the seven basic classifications of voluntary agencies, you will identify one agency in each class.

DIAGNOSTIC PRE-TEST

1. In the following list of methods for raising funds, place a V beside those that are commonly used by voluntary agencies.

- ☐ Endowments
- ☐ Taxes
- ☐ Donations
- ☐ Campaign subscriptions
- ☐ Income earned
- ☐ Investments
- ☐ Patient fees
- ☐ Membership dues
- ☐ Grants
- ☐ Sale of bonds

2. In the following list of programs and activities, place a V beside those that are commonly employed by voluntary agencies.

- ☐ Support demonstration projects
- ☐ Support beneficial health legislation
- ☐ Enact health legislation
- ☐ Help train health personnel
- ☐ Accountable to state and local government agencies
- ☐ Direct patient services
- ☐ Sponsor educational programs
- ☐ Operate large research laboratories
- ☐ Assess of community health needs
- ☐ Support research
- ☐ Coordinate voluntary and official agencies
- ☐ Give advisory services to official agencies

3. Place an R by the statements below that describe the American Red Cross as a voluntary organization.

- ☐ Started by the efforts of Clara Barton
- ☐ President of the U.S. serves as its president
- ☐ First voluntary agency in U.S.
- ☐ Double bar red cross for emblem
- ☐ Has international status
- ☐ Has quasi-official status
- ☐ Is the official disaster relief agency for the nation
- ☐ Started during the War of Independence
- ☐ Receives both voluntary and tax funds
- ☐ Is the result of a need for organized medical care for soldiers on the battlefield

4. Match basic classifications of voluntary and professional agencies with specific agencies. Place the number of the classification (1 . . . 7) opposite the appropriate agency.

Classification

1. Those concerned with specific diseases
2. Those concerned with special organs and structures of the body
3. Those concerned with the health and welfare of special groups
4. Foundations
5. Professional associations
6. Integrating or coordinating agencies
7. Private proprietary and nonprofit institutions and organizations

Specific Agencies

- ☐ The Maternity Center Association
- ☐ National Kidney Foundation
- ☐ American Diabetes
- ☐ Milbanks Memorial Fund
- ☐ Ford Foundation
- ☐ American Public Health Association
- ☐ National Health Council
- ☐ Blue Cross
- ☐ American Heart Association

PRE-TEST KEY

1. ☒ Endowments
☐ Taxes
☒ Donations
☒ Campaign subscriptions
☐ Income earned
☐ Investments
☒ Patient fees
☒ Membership dues
☒ Grants
☐ Sale of bonds

(1 error allowed)

2. ☒ Support demonstration projects
☒ Support beneficial health legislation
☐ Enact health legislation
☒ Help train health personnel
☐ Accountable to state and local government agencies
☒ Direct patient services
☒ Sponsor educational programs
☐ Operate large research laboratories
☒ Assess of community health needs
☒ Support research
☒ Coordinate voluntary and official agencies
☒ Give advisory services to official agencies

(1 error allowed)

3. R Started by the efforts of Clara Barton
R President of the U.S. serves as its president
— First voluntary agency in U.S.
— Double bar red cross for emblem
R Has international status
R Has quasi-official status
R Is the official disaster relief agency for the nation
— Started during the War of Independence
R Receives both voluntary and tax funds
R Is the result of a need for organized medical care for soldiers on the battlefield

(1 error allowed)

4. 3 The Maternity Center Association
2 National Kidney Foundation
1 American Diabetes
4 Milbanks Memorial Fund
4 Ford Foundation
5 American Public Health Association
6 National Health Council
7 Blue Cross
2 American Heart Association

(no errors allowed)

STUDY SUGGESTIONS

Objectives 1 and 3 require you to recall from memory some information regarding how voluntary agencies acquire their funds and the characteristics that are unique to the American Red Cross. After studying the assignment, test your knowledge of this material with Questions 1 and 3 on the Diagnostic Post-Test. If you were unable to remember the material, restudy the appropriate Review Assignments until you have mastered it.

Objective 2 requires you to understand the types of programs engaged in by voluntary agencies. Your understanding will be tested by having you identify sample programs that are associated with voluntary agencies. The sample programs on the Credit Exam may not be the same as those on the Diagnostic Post-Test, so in your study look for general characteristics that would enable you to identify similar programs.

You can master the material for Objective 4 if you memorize all of the examples given in the Supplemental Reading. This is quite a bit of work, however, and you may want to note the characteristics of particular classifications, such as agencies concerned with specific diseases and those concerned with special organs and structures of the body. It is easy to recognize examples of these. Whatever you decide to do on this one, make sure you use the Diagnostic Post-Test to check your mastery.

ASSIGNMENTS

General

TEXTBOOK:

Chapter 9

SUPPLEMENTAL READINGS:

Voluntary Agencies, page 17Review

TEST ITEM MISSED

STUDY

- | | |
|-------------|--|
| 1 | Supplemental reading,
paragraph 1 |
| 2 | Supplemental reading,
paragraph 2 |
| 3 | Supplemental reading,
paragraph 3 |
| 4 | Supplemental reading,
paragraphs 4-10 |

DIAGNOSTIC POST-TEST

1. In the following list of methods for raising funds, place a V beside those that are commonly used by voluntary agencies.

- ☐ Taxes
- ☐ Membership dues
- ☐ Income earned
- ☐ Campaign subscriptions
- ☐ Grants
- ☐ Patient fees
- ☐ Sale of bonds
- ☐ Donations
- ☐ Investments
- ☐ Endowments

2. In the following list of programs and activities, place a V beside those that are commonly employed by voluntary agencies.

- ☐ Give advisory services to official agencies
- ☐ Support research
- ☐ Operate large research laboratories
- ☐ Direct patient services
- ☐ Help train health personnel
- ☐ Support beneficial health legislation
- ☐ Assess of community health needs
- ☐ Support demonstration projects
- ☐ Coordinate voluntary and official agencies
- ☐ Prepare medical doctors
- ☐ Sponsor educational programs
- ☐ Enforce health laws

3. Place an R by the statements below that describe the American Red Cross as a voluntary organization.

- ☐ Has international status
- ☐ Is the official disaster relief agency for the nation
- ☐ First voluntary agency in U.S.
- ☐ Receives both voluntary and tax funds
- ☐ Started by the efforts of Clara Barton
- ☐ Is the result of a need for organized medical care for soldiers on the battlefield
- ☐ Has quasi-official status
- ☐ President of the U.S. serves as its president
- ☐ Operates only with tax funds
- ☐ Was involved in the prevention of tuberculosis

4. Match basic classifications of voluntary and professional agencies with specific agencies. Place the number of the classification (1 . . . 7) opposite the appropriate agency.

Classifications

1. Those concerned with specific diseases
2. Those concerned with special organs and structures of the body
3. Those concerned with the health and welfare of special groups
4. Foundations
5. Professional associations
6. Integrating or coordination agencies
7. Private proprietary and nonprofit institutions and organizations

Specific Agencies

- ☐ American Medical Association
- ☐ National Safety Council
- ☐ American Hospital Association
- ☐ National Society for the Prevention of Blindness
- ☐ Health Maintenance Organizations
- ☐ American Social Health Association
- ☐ United Funds
- ☐ W.K. Kellogg Foundation
- ☐ National Lung Association

POST-TEST KEY

1. ☐ Taxes
☒ Membership dues
☐ Income earned
☒ Campaign subscriptions
☒ Grants
☒ Patient fees
☐ Sale of bonds
☒ Donations
☐ Investments
☒ Endowments

(1 error allowed)

2. ☒ Give advisory services to official agencies
☒ Support research
☐ Operate large research laboratories
☒ Direct patient services
☒ Help train health personnel
☒ Support beneficial health legislation
☒ Assess of community health needs
☒ Support demonstration projects
☒ Coordinate voluntary and official agencies
☐ Prepare medical doctors
☒ Sponsor educational programs
☐ Enforce health laws

(1 error allowed)

3. R Has international status
R Is the official disaster relief agency for the nation
 First voluntary agency in U.S.
R Receives both voluntary and tax funds
R Started by the efforts of Clara Barton
R Is the result of a need for organized medical care for soldiers on the battlefield
R Has quasi-official status
R President of the U.S. serves as its president
 Operates only with tax funds
 Was involved in the prevention of tuberculosis

(1 error allowed)

4. 5 American Medical Association
3 National Safety Council
5 American Hospital Association
2 National Society for the Prevention of Blindness
7 Health Maintenance Organizations
1 American Social Health Association
6 United Funds
4 W.K. Kellogg Foundation
2 National Lung Association

(no errors allowed)

COMPREHENSIVE HEALTH PLANNING

Unit Seven

INTRODUCTION

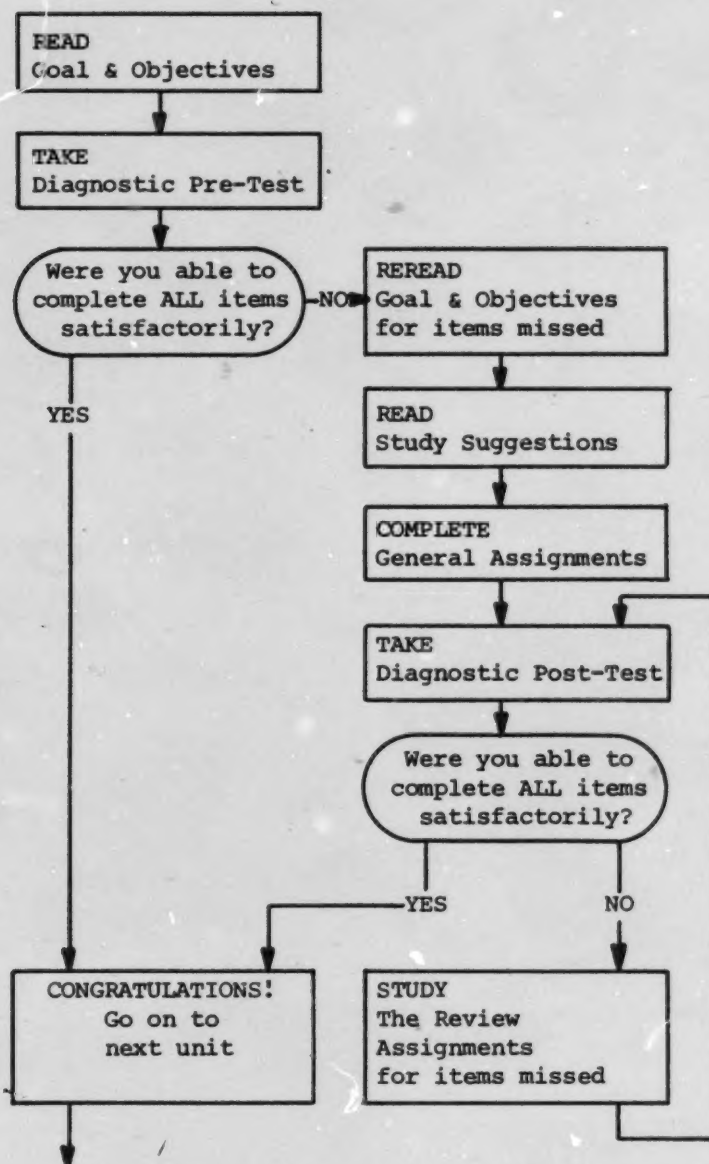
Comprehensive health planning was developed during the 1960's as a more satisfactory alternative to initiating community health programs primarily in response to crisis situations.

Comprehensive health planning attempts to provide the highest level of health for every man, woman, and child through the close cooperation of individuals, voluntary and governmental agencies. The need for providing adequate services, manpower, and facilities at all levels of government helped to give impetus to the passage of a bill for comprehensive health planning. A second reason for the act was a desire to strengthen the leadership and capabilities of state health agencies. Another basic intent of the act was to broaden and make more flexible the health services provided in local communities.

In order to meet these needs, the law provides for federal grants to the states for comprehensive planning at the state level through a designated state agency. Grants are also available for area-wide comprehensive health planning (regional, metropolitan, or other local areas), and for training health planners. These grants to the states provide for a flexible program of public health services based on the states' comprehensive plans. The law also provides support for studies, demonstrations, or training to develop or improve methods of providing services.

An understanding of comprehensive health planning is an important part of any community health study. In this unit, Unit Seven, you will learn the purposes and functions of a comprehensive health planning program.

STUDY MAP



GOAL

Understand the planning process and the fact that all factions of the community must be involved in order to meet health needs and to assure the most effective use of facilities and services.

OBJECTIVES

1. You will define planning, and the opposite of planning.
2. You will describe the disadvantage of meeting health needs without planning.
3. You will list those groups in a community which should be involved in the comprehensive health planning process and state why their participation is important.
4. You will recognize the components involved in each of the four steps in the planning process.
5. You will indicate the status of a health planning council.

DIAGNOSTIC PRE-TEST

1. Define:

(a) Planning

(b) The opposite of planning (meeting crises)

2. What is the basic disadvantage of meeting health needs without planning?

3. List four groups in the community that should be included in the comprehensive health planning process and state why the participation of each group is important.

(a)

(b)

(c)

(d)

4. Match the four steps of the planning process with the component elements involved in each of the steps. Place the number of the step opposite each component element that is a part of that step in the planning process.

<u>Components</u>	<u>Steps</u>
☐ Execution	1. Fact-finding -
☐ Environmental data	diagnosis of the
☐ Review of legislative	problem
☐ authority for program	2. The plan
☐ Description of people	3. Implementation of the
☐ being served	plan
☐ Measure progress	4. Evaluation
☐ Recommend possible	
☐ solutions	
☐ Biological data	
☐ Statement of specific	
☐ health problems	
☐ Description of current	
☐ health personnel and	
☐ resources and programs	
☐ being pursued	
☐ Identify shortcomings	
☐ and reasons for them	
☐ Statement of specific	
☐ health problems and	
☐ proposed operational	
☐ programs	

5. Place a check by the status of a health planning council.

☐ Official
☐ Advisory
☐ Quasi-official

PRE-TEST KEY

1. (a) Planning: An organizational attempt to choose the best course of action to achieve specific goals.
- (b) Opposite of planning (meeting crises): Allowing services to develop to meet the needs of the most apparent problems.
2. Health programs resulting from meeting crises have a tendency to continue long after usefulness has diminished.
3. (a) People from power structure - they are in a position to make decisions.
- (b) Government or political leaders - they provide funds.
- (c) The public - they will be using the services.
- (d) Health workers - they will execute the plan and their cooperation is needed.
4. 3 Execution
 - 1 Environmental data
 - 2 Review of legislative authority for program
 - 2 Description of people being served
 - 4 Measure progress
 - 4 Recommend possible solutions
 - 1 Biological data
 - 2 Statement of specific health problems
 - 2 Description of current health personnel and resources and programs being pursued
 - 4 Identify shortcomings and reasons for them
 - 2 Statement of specific health problems and proposed operational programs

(2 errors allowed)

5. ☐ Official
☒ Advisory
☐ Quasi-official

STUDY SUGGESTIONS

Each of the five objectives in this unit requires you to memorize material well enough to recall it on a test. Use the instructional objectives to pinpoint the material you are to learn and then, after study, check your mastery with the Diagnostic Post-Test. If you find you have not mastered some of the required material, restudy the appropriate review assignments until you can answer all the questions on the test. The questions on the Credit Exam will cover the same material.

ASSIGNMENTS

General

SUPPLEMENTAL READINGS:

Comprehensive Health Planning, page 19

Review

TEST ITEMS MISSED

STUDY

- | | |
|---------------|---|
| 1-2 | Supplemental reading,
paragraph 1 |
| 3 | Supplemental reading,
paragraph 2 |
| 4 | Supplemental reading,
paragraphs 3-6 |
| 5 | Supplemental reading,
paragraph 1 |

DIAGNOSTIC POST-TEST

1. Define: .
 - (a) Planning
 - (b) The opposite of planning (meeting crises)
2. What is the basic disadvantage of meeting health needs without planning?
3. List four groups in the community that should be included in the comprehensive health planning process and state why the participation of each group is important.
 - (a)
 - (b)
 - (c)
 - (d)

4. Match the four steps of the planning process with the component elements involved in each of the steps. Place the number of the step opposite each component element that is a part of that step.

<u>Components</u>	<u>Steps</u>
☐ Statement of specific health problems	1. Fact-finding - diagnosis of the problem
☐ Statement of specific health problems and proposed operational programs	2. Evaluation
☐ Execution	3. The plan
☐ Measure progress	4. Implementation of the plan
☐ Description of current health personnel and resources and programs being pursued	
☐ Environmental data	
☐ Population characteristics, health personnel, and resources	
☐ Identify shortcomings and reasons for them	
☐ Biological data	
☐ Review of legislative authority for program	
☐ Description of people being served	
☐ Recommend possible solutions	

5. Place a check by the status of the health planning council.

☐ Official
☐ Quasi-official
☐ Advisory

POST-TEST KEY

1. Planning: An organizational attempt to choose the best course of action to achieve specific goals.

The opposite of planning (meeting crises): Allowing services to develop to meet the needs of the most apparent problems.

2. Health programs resulting from meeting crises have a tendency to continue long after usefulness has diminished.

3. (a) People from the power structure - they are in a position to make decisions.

(b) Government or political leaders - they provide funds.

(c) The public - they will be using the services.

(d) Health workers - they will execute the plan and their cooperation is needed.

4. 3 Statement of specific health problems
3 Statement of specific health problems and proposed operational programs
4 Execution
2 Measure progress
3 Description of current health personnel and resources and programs being pursued
1 Environmental data
1 Population characteristics, health personnel, and resources
2 Identify shortcomings and reasons for them
1 Biological data
3 Review of legislative authority for program
3 Description of people being served
2 Recommend possible solutions

(2 errors allowed)

5. ☐ Official
☐ Quasi-official
☒ Advisory

EPIDEMIOLOGY—THE DISEASE PROCESS

Unit Eight

INTRODUCTION

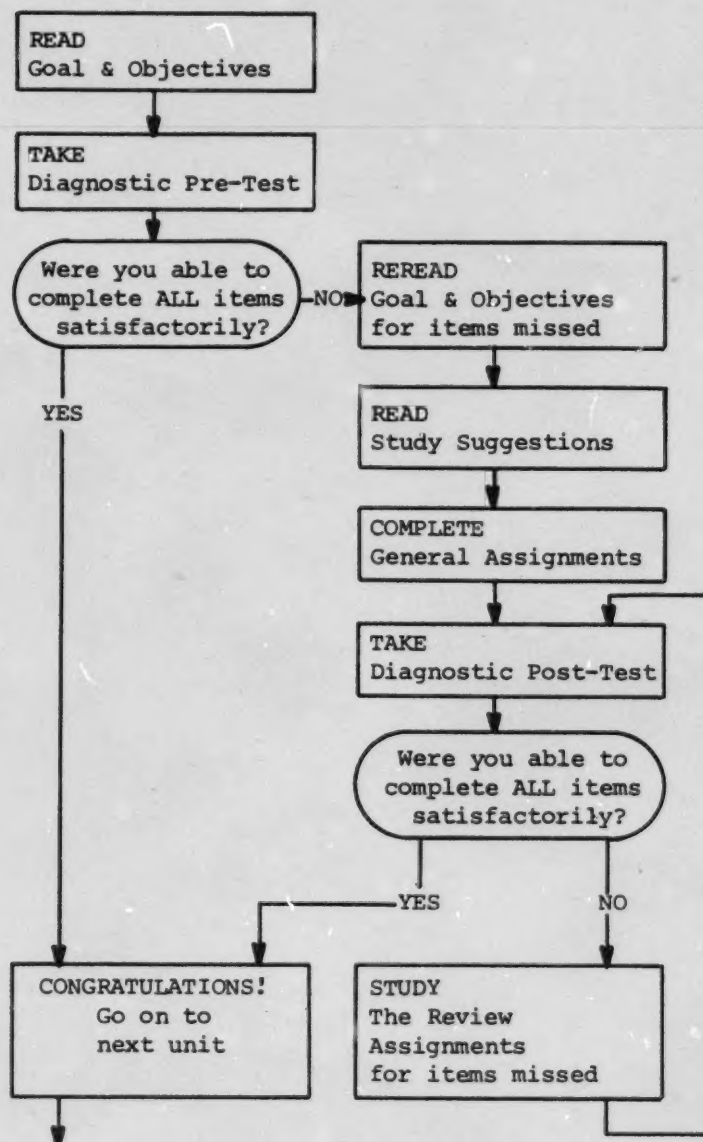
In modern medical science, epidemiology attempts to describe the distribution of human health problems and to establish the causes of these problems in an effort to discover and formulate effective preventative measures. Epidemiology is a body of knowledge, as well as a method of investigating the health-disease process.

Epidemiology deals with the distribution of health, disease, defects, disability, and death in a population. Many factors influence the incurrence and spread of disease and degenerative conditions, as well as the occurrence of accidents. Epidemiology is concerned with a study of the events and processes which influence the physical, mental, and social health of people. The ultimate goal in the epidemiological process is to discover at what point a phenomenon can be intercepted in order to prevent the development of physical, mental, and social health problems.

The earliest contributions to the science of epidemiology concerned infectious diseases. These include the discovery of microorganisms as causative agents of disease, the development of immunology, and the acquisition of new knowledge regarding the transmission of disease. The actual discovery that infectious diseases are caused by some form of microorganisms occurred in the middle of the last century, although the theory had been espoused hundreds of years. For many years the principle function of epidemiology was to investigate epidemics--tracing their source, controlling their spread, and initiating measures to prevent reoccurrence.

Since the ultimate goal of epidemiology is the prevention of disease, an understanding of the epidemiological process is a vitally important part of any study of community health problems.

STUDY MAP



GOAL

Understand the historical background in the development of disease and the factors involved which determine whether a condition or disease will spread or become acute or chronic and how it can be prevented, controlled, or eliminated.

OBJECTIVES

1. You will identify examples of descriptive epidemiology, analytic epidemiology, and experimental epidemiology.
2. You will identify definitions of the following terms: epidemiology, pathogenic, symbiosis, contact, and susceptible.
3. In a description of how a particular disease is transmitted, you will identify any of the following elements: infection, disease, carrier, reservoir, vector, mechanical transport, and fomite.
4. You will list the three factors which interact in the development of all diseases and the methods that can be used with each to intercept the disease process.
5. You will match the kinds of immunity with appropriate definitions or descriptions.
6. You will list the five factors which determine whether disease develops after infection.

DIAGNOSTIC PRE-TEST

1. Indicate which of the studies described below is an example of:

Descriptive epidemiology _____
 Analytic epidemiology _____
 Experimental epidemiology _____

Example I An epidemiologist compiled the following incidence rates about cancer for the year of 1968:

<u>Location of Cancer</u>	<u>Men</u>	<u>Women</u>
Breast	rare	23%
Lung	17%	3%
Digestive	10%	8%
Skin	23%	13%

Example II Over a ten-year period records of deaths among smokers and non-smokers were analyzed with the results showing a statistical association between smoking and lung cancer.

Example III A new nuclear reactor has just been built within a twenty-mile radius of a community having a population of 50,000. In order to determine the effects of radiation fallout from the reactor, the population will be studied to detect symptoms detailed in another population not exposed to radiation fallout.

2. Epidemiology is: (select the one best answer)

- (a) the study of the history of major epidemics and their causes.
- (b) a body of knowledge and method of investigating diseases of the skin.
- (c) a body of knowledge and a method of investigating the health-disease process.
- (d) the study of microorganisms.

3. Pathogenic means:

- (a) a potentially dangerous state of mental imbalance.
- (b) causes disease to man.
- (c) host relationship with infected host.
- (d) harmonic relationship between microorganism and host.

4. Symbiosis is:

- (a) the relationship of a disease-producing microorganism with a host.
- (b) the host relationship with an infected host.
- (c) the state between infection and the appearance of visible symptoms.
- (d) man and microorganisms living together in harmony.

5. Contact means:

- (a) a relationship between a microorganism and hosts.
- (b) a host's relationship with an infected host.
- (c) a system through which a microorganism enters a host.
- (d) the result of using an effective antibiotic.

6. Susceptible means:

- (a) a person or animal has little resistance to the disease-causing agent.
- (b) a host's relationship with an infected host.
- (c) a disease-causing agent has little resistance to an antibiotic.
- (d) a person or animal is likely to react to use of an antibiotic.

7. Consider the following situation: A mosquito carries a virus that causes yellow fever in humans. This mosquito "bites" a person, thereby transmitting some of the virus into his bloodstream. After a few hours the person displays fever, jaundice, and other symptoms of the disease.

(a) Does this description contain an example of a carrier? If so, what?

(b) Does this description contain an example of a reservoir? If so, what?

(c) Does this description contain an example of a vector? If so, what?

(d) Does this description contain an example of mechanical transport? If so, what?

(e) Does this description contain an example of a fomite? If so, what?

(f) At what point could we say that this person became infected?

(g) At what point could we say that this person became diseased?

8. List the three factors which interact in the development of all disease and the methods which can be used with each to intercept the disease process.

I.

A.

1.

2.

3.

B.

1.

2.

3.

II.

A.

1.

2.

3.

III.

A.

1.

2.

9. Match the kinds of immunity with source. Place the number of the source opposite the type of immunity that results.

Source

1. From mother to child
2. Inoculations of antibodies
3. Results of infection
4. In the genes
5. Inoculation of antigens

Types of immunity

- ___ Active immunity
- ___ Artificial active immunity
- ___ Natural passive immunity
- ___ Artificial passive immunity
- ___ Inherited immunity

10. List the five factors which determine whether disease develops after infection.

(a)

(b)

(c)

(d)

(e)

PRE-TEST KEY

1. Descriptive epidemiology I
Analytic epidemiology II
Experimental epidemiology III
2. c
3. b
4. d
5. b
6. a
7. (a) No
(b) Yes, mosquitos
(c) Yes, mosquito
(d) No
(e) No
(f) When the mosquito bit him
(g) When the person displayed fever, jaundice, and other symptoms

8. I. Agent
 - A. Methods to intercept microorganisms
 1. Fumigation
 2. Disinfection
 3. Sterilization
 - B. Methods to intercept vectors
 1. Fumigation
 2. Prevention of breeding
 3. Sanitary surveillance
- II. Host
 - A. Methods of intercepting the disease process
 1. Promote and maintain general good health and nutrition
 2. Give immunizations
 3. Treat disease
- III. Common Environment
 - A. Methods of intercepting the disease process
 1. Eradication of reservoirs
 2. Reduction of the communicability of reservoirs

9. 3 Active immunity
5 Artificial active immunity
1 Natural passive immunity
2 Artificial passive immunity
4 Inherited immunity

(no errors allowed)

10. (a) Resistance of host
- (b) Virulence of agent and number
- (c) Reservoir of source
- (d) Mode of transmission
- (e) Portal of entry

(no errors allowed)

STUDY SUGGESTIONS

Objectives 1 and 3 require you to apply concepts such as descriptive epidemiology, reservoir, fomite, etc., to sample situations involving these concepts. (See Questions 1 and 7 on the Diagnostic Post-Test.) Keep in mind that the Credit Exam will contain the same types of questions but will ask you to apply the information in a different situation.

Objectives 2, 4, 5, and 6 require you to memorize some material well enough to recall it or recognize it on the exam. As you study, use the Objectives as guides to pinpoint material on which you will need to concentrate. After study, use the Diagnostic Post-Test to determine whether or not you have mastered the material. If you miss items on the test, use the Review Assignments to help you restudy those items.

ASSIGNMENTS

General

TEXTBOOK:

Chapter 3

SUPPLEMENTAL READINGS:

Epidemiology, page 21

Review

TEST ITEM MISSED

STUDY

1 Supplemental reading,
paragraph 1

2 Introduction to Unit Eight,
paragraph 1

3, 4 Supplemental reading,
paragraph 2

5, 6 Supplemental reading,
paragraph 7

7 Supplemental reading,
paragraphs 3-6

8 Supplemental reading,
paragraphs 8-10

9 Supplemental reading,
paragraphs 11, 12

10 Supplemental reading,
paragraph 13

DIAGNOSTIC POST-TEST

1. Indicate which of the studies described below is an example of:

Descriptive epidemiology _____

Analytic epidemiology _____

Experimental epidemiology _____

Example I An epidemiologist compiled data on persons who suffer heart attacks. He concluded that about one-half million die every year from coronary heart attacks.

Example II A statistician compiled a large amount of data about the exercise, eating, drinking, and smoking habits of people who suffer heart attacks.

Example III In order to carefully determine the effect of exercise on heart disease, a doctor put half of a group of volunteers on a strict exercise schedule and allowed the other half to continue on their normal exercise routine. After several years he compared the differences in frequencies of heart diseases between the exercise and non-exercise groups.

2. Epidemiology is: (select the one best answer)

- (a) the study of history's major epidemics and their causes.
- (b) the study of microorganisms.
- (c) a body of knowledge and method of investigating diseases of the skin.
- (d) a body of knowledge and a method of investigating the health-disease process.

3. Pathogenic means:

- (a) harmonic relationship between microorganism and host.
- (b) host relationship with infected host.
- (c) a potentially dangerous state of mental imbalance.
- (d) causes disease in man.

4. Symbiosis is:

- (a) the state between infection and the appearance of visible symptoms.
- (b) man and microorganisms living together in harmony.
- (c) the relationship of a disease-producing microorganism with a host.
- (d) the host relationship with an infected host.

5. Contact means:

- (a) the system through which a microorganism enters a host.
- (b) the result of using an effective antibiotic.
- (c) the host relationship with an infected host.
- (d) the relationship between a microorganism and hosts.

6. Susceptible means:

- (a) the host relationship with an infected host.
- (b) a disease-causing agent has little resistance to an antibiotic.
- (c) a person or animal is likely to react to use of an antibiotic.
- (d) a person or animal has little resistance to the disease-causing agent.

7. A picnic was held in a park with a cattle farm adjoining. On the farm large amounts of cattle manure were exposed and a large number of flies fed on it. These same flies crawled around on the food the people ate at the picnic. Most of the people became ill with a food-borne infection (Salmonellosis) after eating.

Place a check by each of the following for which there is an example in the situation described.

- | | |
|---|-------|
| ___ Pathogen - if so, what? | _____ |
| ___ Symbiosis - if so, what? | _____ |
| ___ Carrier - if so, what? | _____ |
| ___ Reservoir - if so, what? | _____ |
| ___ Vector - if so, what? | _____ |
| ___ Mechanical transport - if so, what? | _____ |
| ___ Fomite - if so what? | _____ |
| ___ Contact - if so, what? | _____ |
| ___ Susceptible - if so, what? | _____ |

8. List the three factors which interact in the development of all disease and the methods which can be used with each to intercept the disease process.

I.

A.

- 1.
- 2.
- 3.

B.

- 1.
- 2.
- 3.

II.

A.

- 1.
- 2.
- 3.

III.

A.

- 1.
- 2.

9. Match kinds of immunity with source. Place the number of the source opposite the type of immunity that results.

Source

1. In the genes
2. From mother to child
3. Inoculation of antigens
4. Results of infection
5. Inoculations of antibodies

Types of immunity

- ___ Inherited immunity
- ___ Artificial active immunity
- ___ Natural passive immunity
- ___ Artificial passive immunity
- ___ Active immunity

10. List the five factors which determine whether disease develops after infection.

(a)

(b) |

(c)

(d)

(e)

POST-TEST KEY

1. Descriptive epidemiology I
 Analytic epidemiology II
 Experimental epidemiology III
2. d
3. d
4. b
5. c
6. d
7. x Pathogen Salmonellosis
— Symbiosis
— Carrier
x Reservoir manure
— Vector
x Mechanical transport flies
— Fomite
— Contact
x Susceptible anybody having a picnic

8. I. Agent

A. Methods to intercept microorganism

1. Fumigation
2. Disinfection
3. Sterilization

B. Methods to intercept vectors

1. Fumigation
2. Prevention of breeding
3. Sanitary surveillance

II. Host

A. Methods of intercepting the disease process

1. Promote and maintain general good health and nutrition
2. Give immunizations
3. Treat disease

III. Common Environment

A. Methods of intercepting the disease process

1. Eradication of reservoirs
2. Reduction of the communicability of reservoirs

9. 1 Inherited immunity

3 Artificial active immunity

2 Natural passive immunity

5 Artificial passive immunity

4 Active immunity

(no errors allowed)

10. (a) Resistance of host

(b) Virulence of agent and number

(c) Reservoir of source

(d) Mode of transmission

(e) Portal of entry

(no errors allowed)

* * *

THE MEDICAL CARE SYSTEM

Unit Nine

INTRODUCTION

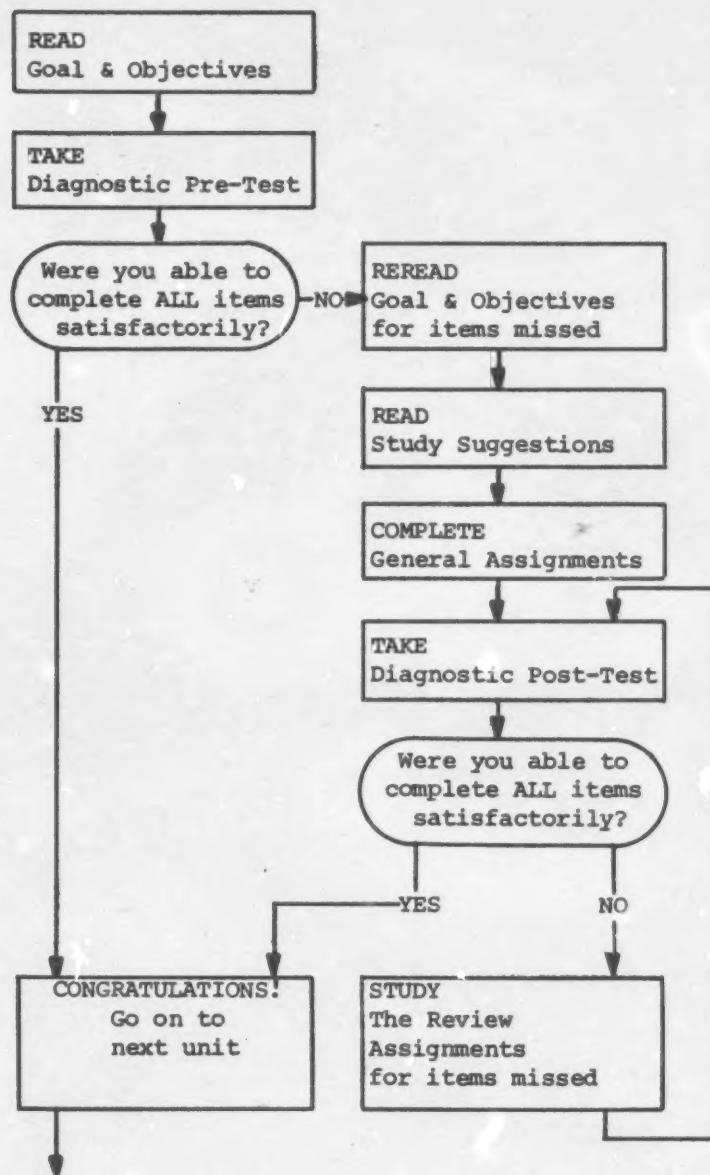
Medical care refers to the aggregate of services which are available to individuals for prevention, treatment, or rehabilitation. The medical care system refers to the biomedical knowledge used in rendering medical services as well as medical agencies and personnel.

In the United States the medical care system is primarily private in nature, in contrast to the socialized medical programs in many European countries. However, in this country there is a movement towards developing some kind of national health insurance program which would be the equivalent of socialized medicine in many respects. At the present time in the United States, medical care is based on a fee for service. It has become apparent over the years that this type of service precludes many of the indigent from securing adequate medical care. There has developed in recent years a general philosophy that everyone has the right to the medical services necessary to insure good health. It is because of this philosophy that forces for some kind of national health insurance program are at work.

- The basic concept of a national health insurance program can be traced to the Elizabethan poor laws in England at the time the colonies were being settled in the United States. These laws influenced the establishment of charity hospitals as well as public health programs in this country. In addition, the fact that we take care of the medical needs of our military men has helped to lay the foundation for some type of a national program. The advent of chronic diseases as the primary cause of death and the relatively high cost of treatment incurred for long-term illnesses have also increased the demand for federal assistance in the medical care program.

This unit, Unit Nine, will familiarize the student with the sources of financing for the medical care system we have in the United States at the present time.

STUDY MAP



GOAL

Become familiar with the organization of both the public and private sectors of the medical care system.

OBJECTIVES

1. You will list the three basic resources of the medical care system.
2. You will list the three levels of medical care services.
3. You will match types of privately sponsored health insurance programs with their characteristics.
4. You will list the health care programs provided by the Social Security Acts of 1935 and 1965.
5. You will diagram the basic medical care system in the United States and explain how it works.

DIAGNOSTIC PRE-TEST

1. List the three basic resources of the medical care system.

(a)

(b)

(c)

2. List the three levels of medical care services.

(a)

(b)

(c)

3. Match types of health insurance programs with their characteristics. Place the number of the appropriate program opposite each characteristic. Some characteristics may apply to more than one program.

<u>Characteristics</u>	<u>Insurance Programs</u>
___ For those that are medically indigent	1. Health maintenance organizations
___ 100 days extended care	2. Blue Cross
___ Service benefits	3. Commercial health care programs
___ Limited risk	4. Blue Shield
___ Physicians and facilities available to members of group	5. Medicare
___ Fixed dollar per day	6. Medicaid
___ 90 days hospitalization	
___ Means test for medical indigency	
___ Provider-sponsored physician's care insurance	
___ Independent health insurance	
___ Financed through state-federal matching funds	
___ Government sponsored	
___ Physicians have reserved right to charge more	
___ Started by American Hospital Association	
___ Indemnity benefits	
___ Provider-sponsored hospital insurance	

4. List the health care programs provided by the Social Security Acts of 1935 and 1965 and the recipients of each program.

1935: _____

(a)

(b)

(c)

(d)

1965: _____

(a)

(a)

5. Diagram the basic medical care systems and give some explanation as to how it works in the United States.

PRE-TEST KEY

1. (a) Biomedical knowledge
(b) Facilities and equipment
(c) Health manpower
2. (a) Primary: prevention
(b) Secondary: treatment
(c) Tertiary: rehabilitation
3.

6	For those that are medically indigent
5	100 days extended care
4, 2	Service benefits
3	Limited risk
1	Physicians and facilities available to members of group
3	Fixed dollar per day
5	90 days hospitalization
6	Means test for medical indigency
4	Provider-sponsored physician's care insurance
1	Independent health insurance
6	Financed through state-federal matching funds
5	Government sponsored
4	Physicians have reserved right to charge more
2	Started by American Hospital Association
3	Indemnity benefits
2	Provider-sponsored hospital insurance

(3 errors allowed)

4. 1935: Medical care for those who qualified for assistance programs

- (a) Old age assistance
- (b) Aid to the blind
- (c) Aid to families with dependent children
- (d) Aid to the totally and permanently disabled

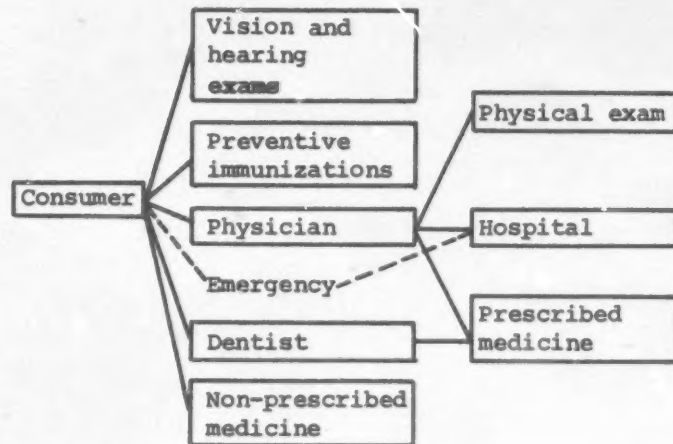
1965: Medicare

- (a) Hospitalization for everyone 65 years of age or older

Medicaid

- (a) Medical care for the medically indigent

5. Diagram the basic medical care system in the United States and explain how it works.



The medical care system is private in nature. The physician is the key to entrance into the medical care system. Physicians admit all patients into hospitals with the exception of cases of emergency. The physician writes all prescriptions.

The consumer may be able to get some vision and hearing examinations, preventive immunizations, non-prescribed medicines, and the service of a dentist without going through a physician.

STUDY SUGGESTIONS

All five objectives in this unit require you to master material well enough to recall or recognize it on the Credit Exam. Check yourself with the Diagnostic Post-Test after you study the material for this unit. If you miss items on the test, restudy the appropriate review assignments until you can answer all the questions correctly.

ASSIGNMENTS

General

SUPPLEMENTAL READINGS:

The Medical Care System, page 25

REPRINT:

Health-Policy Directions for the 1970's,
page 27

Specific

TEST ITEM MISSED	STUDY
1-2	Supplemental reading, paragraph 1
3	Supplemental reading, paragraphs 2-4
4	Supplemental reading, paragraph 4
5	Supplemental reading, paragraph 5

DIAGNOSTIC POST--TEST

1. List the three basic resources of the medical care system.

(a)

(b)

(c)

2. List the three levels of medical care services.

(a)

(b)

(c)

3. Match types of health insurance programs with their characteristics. Place the number of the appropriate program opposite each characteristic. Some characteristics may apply to more than one program.

<u>Characteristics</u>	<u>Insurance Programs</u>
___ Government sponsored	1. Medicare
___ Independent health insurance	2. Blue Shield
___ 90 days hospitalization	3. Medicaid
___ Means test for medical indigency	4. Health maintenance organizations
___ Limited risk	5. Blue Cross
___ Provider-sponsored hospital insurance	6. Commercial health care programs
___ Physicians and facilities available to members of group	
___ Physicians have reserved right to charge more	
___ For those who are medically indigent	
___ Service benefits	
___ Fixed dollar per day	
___ Indemnity benefits	
___ Started by American Hospital Association	
___ Financed through state-federal matching funds	
___ Provider-sponsored physician's care insurance	
___ 100 days extended care	

4. List the health care programs provided by the Social Security Acts of 1935 and 1965 and the recipients of each program.

1935: _____

(a)

(b)

(c)

(d)

1965: _____

(a)

(a)

5. Diagram the basic medical care systems and give some explanation as to how it works in the United States.

POST-TEST KEY

1. (a) Biomedical knowledge
- (b) Facilities and equipment
- (c) Health manpower

2. (a) Primary: prevention
- (b) Secondary: treatment
- (c) Tertiary: rehabilitation

3. 1 Government sponsored
- 4 Independent health insurance
- 1 90 days hospitalization
- 3 Means test for medical indigency
- 6 Limited risk
- 5 Provider-sponsored hospital insurance
- 4 Physicians and facilities available to members of group
- 2 Physicians have reserved right to charge more
- 3 For those that are medically indigent
- 2, 5 Service benefits
- 6 Fixed dollar per day
- 6 Indemnity benefits
- 5 Started by American Hospital Association
- 3 Financed through state-federal matching funds
- 2 Provider-sponsored physician's care insurance
- 1 100 days extended care

4. 1935: Medical care for those who qualified for assistance programs

- (a) Old age assistance
- (b) Aid to the blind
- (c) Aid to families with dependent children
- (d) Aid to the totally and permanently disabled

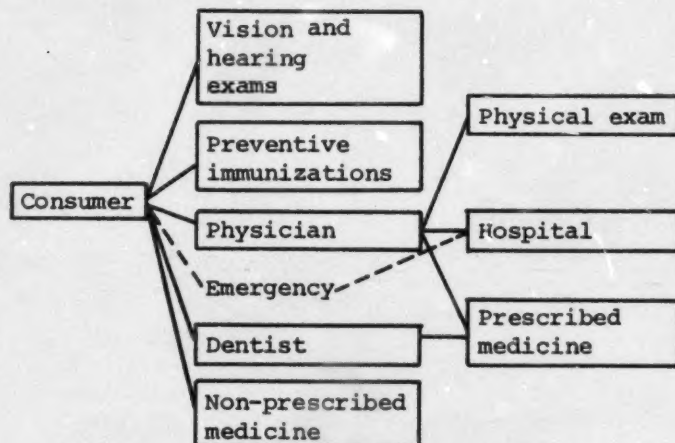
1965: Medicare

- (a) Hospitalization for everyone 65 years of age or older

Medicaid

- (a) Medical care for the medically indigent

5.



The medical care system is private in nature. The physician is the key to entrance into the medical care system. Physicians admit all patients into hospitals with the exception of cases of emergency. The physician writes all prescriptions.

(continued on next page)

5. The consumer may be able to get some vision and hearing examinations, preventive immunizations, non-prescribed medicines, and the service of a dentist without going through a physician.

* * *

USING COMMUNITY HEALTH SERVICES

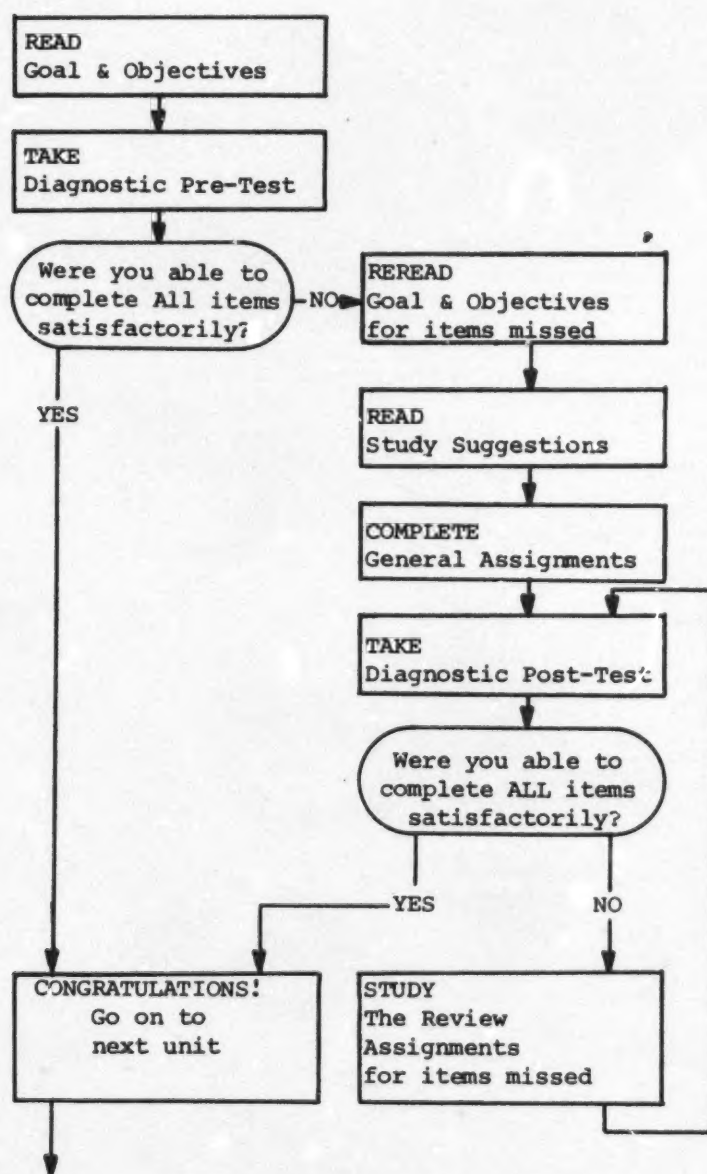
Unit Ten

INTRODUCTION

One of the primary goals of health education is to close the gap between scientific medical knowledge and existing health practices. It is a well-known fact that people still believe in superstition and old wives tales concerning medical treatment. Many times what is learned in the research laboratory is not put into use until many years later because of the human tendency to continue using familiar health practices. It is the underprivileged or deprived segments of society who find it most difficult to change. This group is referred to as the hard-to-reach. In order to reach people with the latest scientific medical knowledge and make it possible for them to learn good health habits, health educators must understand values and how they motivate people. Religious beliefs and one's personal family have a very great influence on health behavior.

Success in public health education requires teamwork between all of the medical professionals and the consumers of health services. A health educator must understand health agency programs and services and how to motivate people to use these services at the appropriate time and in the appropriate manner. Therefore, health educators must understand human behavior and how it is influenced.

STUDY MAP



GOAL

Become familiar with the types of programs and agencies that are available for assisting individuals with health needs and directing them to the appropriate community health services.

OBJECTIVES

1. You will list the three factors that determine the level of community health or public health at any point in time.
2. You will list the six factors that determine the makeup of a public health program.
3. You will list the three basic factors which usually determine eligibility for health services.
4. You will list the usual sources for health services information.
5. You will list the basic steps involved in getting people with health needs to the agency rendering the needed service.

DIAGNOSTIC PRE-TEST

1. List the three factors that determine the level of health a community enjoys at any point in time.

(a)

(b)

(c)

2. In the following list of statements, place a check by those which help to determine the makeup of a public health program. Leave blank any statements that are not relevant.

- ☐ Morbidity rate
- ☐ Needs and wants of the people - how they accept the program
- ☐ Crude death rate
- ☐ Religious beliefs of the people
- ☐ Hospitals
- ☐ Legal requirements
- ☐ Scientific knowledge available
- ☐ Accessibility to the problem
- ☐ Size of public health staff
- ☐ Cost
- ☐ Wishes of health personnel - professional societies, service clubs, and voluntary agencies

3. List the three basic factors which usually determine eligibility for health services.

(a)

(b)

(c)

4. What are the three most likely sources you could refer a person to who was seeking health services information?

(a)

(b)

(c)

5. Assume that you are working in a health referral agency. Place a check by the five basic steps that you would follow in referring an individual with a health problem to the agency rendering the needed service. Leave blank those statements that would not be appropriate to a referral agency.

- ___ Define the problem. What specifically is needed or wanted?
- ___ Have a diagnosis made of the health problem.
- ___ Ascertain all pertinent information about the problem. What other assistance is the client now receiving or has he received in the past?
- ___ Determine the cost of the service.
- ___ Screen the client to determine if he really has a health problem.
- ___ Select the right agency or solution.
- ___ Evaluate the success of referrals. Did the client carry through on the referral or recommendation for treatment?
- ___ Determine the death rate relative to the health problem.
- ___ Maintain a current file of community resources.

PRE-TEST KEY

1. (a) Disease - nature and severity
- (b) Theories as to cause, treatment, and control
- (c) Prevailing social, theologic, economic, and political ideologies

2. ☐ Morbidity rate
- ☒ Needs and wants of the people - how they accept the program
- ☐ Crude death rate
- ☒ Religious belief of the people
- ☐ Hospitals
- ☒ Legal requirements
- ☒ Scientific knowledge available
- ☒ Accessibility to the problem
- ☐ Size of public health staff
- ☐ Cost
- ☒ Wishes of health personnel - professional societies, service clubs, and voluntary agencies

(no errors allowed)

3. (a) Residency
- (b) Religious affiliation
- (c) Financial eligibility

4. (a) An information and referral agency
- (b) The local health department
- (c) Any health agency

5. ☒ Define the problem.
☐ Have a diagnosis made of the health program.
☒ Ascertain all pertinent information about the problem.
☐ Determine the cost of the service.
☐ Screen the client to determine if he really has a health problem.
☒ Select the right agency or solution.
☒ Evaluate the success of referrals.
☐ Determine the death rate relative to the health problem.
☒ Maintain a current file of community resources.

(no errors allowed)

STUDY SUGGESTIONS

All five objectives in Unit Ten require you to memorize material and recall or recognize it on the Credit Exam. Here again, you should use the Goal and Objectives to identify what it is you need to learn. After reading the General Assignments, use the Diagnostic Post-Test to check your mastery of the material. If you miss items on the test, consult the Review Assignments and restudy for the items you missed until you can pass the test.

ASSIGNMENTS

General

TEXTBOOK:

Chapter 10
Chapter 11
Chapter 12

SUPPLEMENTAL READINGS:

Using Community Health Services, page 39

Review

TEST ITEM MISSED

STUDY

- | | |
|-------------|--------------------------------------|
| 1 | Supplemental reading,
paragraph 1 |
| 2 | Supplemental reading,
paragraph 2 |
| 3 | Textbook, pages 356-357 |
| 4 | Supplemental reading,
paragraph 3 |
| 5 | Textbook, pages 359-360 |

DIAGNOSTIC POST-TEST

1. List the three factors that determine the level of health a community enjoys at any point in time.

(a)

(b)

(c)

2. In the following list of statements, place a check by those which help to determine the makeup of a public health program. Leave blank any statements that are not relevant.

- ☐ Size of public health staff
- ☐ Legal requirements
- ☐ Scientific knowledge available
- ☐ Religious beliefs of the people
- ☐ Crude death rate
- ☐ Needs and wants of the people - how they accept the program
- ☐ Wishes of health personnel - professional societies, service clubs, and voluntary agencies
- ☐ Cost
- ☐ Accessibility to the program
- ☐ Morbidity rate

3. List the three basic factors which usually determine eligibility for health services.

(a)

(b)

(c)

4. What are the three most likely sources you could refer a person to who was seeking health services information?

(a)

(b)

(c)

5. Assume that you are working in a health referral agency. Place a check by the five basic steps that you would follow in referring an individual with a health problem to the agency rendering the needed service. Leave blank those statements that would not be appropriate to a referral agency.

- ☐ Determine the cost of the service.
- ☐ Determine the death rate relative to the health problem.
- ☐ Select the right agency or solution.
- ☐ Have a diagnosis made of the health problem.
- ☐ Maintain a current file of community resources.
- ☐ Define the problem. What specifically is needed or wanted?
- ☐ Ascertain all pertinent information about the problem. What other assistance is the client now receiving or has he received in the past?
- ☐ Evaluate the success of referrals. Did the client carry through on the referral or recommendation for treatment.
- ☐ Screen people to determine if they really have a health problem.

POST-TEST KEY

1. (a) Disease - nature and severity
(b) Theories as to cause, treatment, and control
(c) Prevailing social, theologic, economic, and political ideologies

2. ☐ Size of public health staff
☒ Legal requirements
☒ Scientific knowledge available
☒ Religious beliefs of the people
☐ Crude death rate
☒ Needs and wants of the people - how they accept the program
☒ Wishes of health personnel - professional societies, service clubs, and voluntary agencies
☐ Cost
☒ Accessibility to the program
☐ Morbidity rate

(no errors allowed)

3. (a) Residency
(b) Religious affiliation
(c) Financial eligibility

4. (a) An information and referral agency
(b) The local health department
(c) Any health agency

5. ☐ Determine the cost of the service.
☐ Determine death rate relative to the health problem.
☒ Select the right agency or solution.
☐ Have a diagnosis made of the health problem.
☒ Maintain a current file of community resources.
☒ Define the problem.
☒ Ascertain all pertinent information about the problem.
☒ Evaluate the success of referrals.
☐ Screen the client to determine if he really has a health problem.

COMMUNITY HEALTH

Student Manual

Charles E. Reed, M.P.H., Ph.D.

**INSTITUTE FOR PERSONAL AND CAREER DEVELOPMENT
CENTRAL MICHIGAN UNIVERSITY**

COMMUNITY HEALTH
STUDENT MANUAL

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USE OF STUDENT MANUAL

Is your first inclination to skim this manual quickly and get on to the content of the course? If it is, don't. This manual contains information essential to your success in the course.

Even in a typical course there is a need for you to know such things as grading policies, when tests are to be taken, and what material is to be covered. Such information is necessary for this course also, but more is needed because it is structured quite differently from typical university courses. In addition to reading assignments, the instructor has provided a study map, a general goal and instructional objectives, self-diagnostic tests and study suggestions. The reading assignments themselves provide more information than those you may have used before.

All of these can be a substantial aid to you if used correctly. A section on each of them has been included in the Instructional Strategies part of this manual. Please read this manual carefully and thoroughly so you will know how the course works and what you are expected to do.

COURSE DESCRIPTION

This three credit-hour course in community health is the study of organizations providing communities with health services and the methods they employ. More specifically, it is a survey of the basic community health problems (mental health, communicable diseases, accidents, environmental conditions, and chronic diseases) which have broad socio-economic implications, and the efforts engaged in by official (governmental) and voluntary (nongovernmental) agencies at the national, state, and local levels to prevent and control those problems, while promoting positive health practices.

The emphasis is on public health as a profession and the health-related activities which affect the quality of life that a community can provide for its residents. The ultimate goal of this course is to help students realize that a community's health is only as good as the health of the individuals who live in the community, and that to be truly effective, community health programs must deal with and provide for real people.

A review of the major standard texts in the field reveals that the authors perceive the content of a course in community health differently. Although many of the topics found in this course of study can be identified in most standard texts on community health, no one text includes them all. Accordingly, this course includes a book of supplemental readings in addition to the textbook. The major topics covered in this course are: major health problems in the United States, the need for community health, the historical development of preventative medicine and public health, official and voluntary agencies responsible for health protection, the local health department, comprehensive health planning, epidemiology, or the disease process, and the medical care system.

NATURE OF THE COURSE

This course is a study of the individuals and organizations dedicated to helping people attain optimum levels of health and well-being. It focuses on official agencies based in law and financed by taxes, as well as on voluntary agencies composed of private citizens interested in promoting the physical, emotional, and social health of the community. In order for you to understand the complex ramifications of community health, you must become acquainted with the programs of health agencies and the methods they use to promote healthful living, prevent disabilities, correct remediable defects, treat illness, and rehabilitate the handicapped.

You will become familiar with the leading causes of mortality (the proportion of deaths to population) and morbidity (the relative incidence of disease), as well as with changes in population, and social and economic conditions. The major health problems resulting in illness, disability and death are reviewed: chronic and degenerative diseases, communicable diseases, environmental problems, mental illness and accidents. The causes, treatment, and prevention of each is considered briefly.

You will look at the historical development of scientific medical knowledge and the technological advancements which have made it possible for man to improve his physical and mental well-being. These developments have led to the recognition of public health as a professional field. You will also consider the social conditions which breed disease and the legislation which provides funds to combat death and sickness.

A study of community health must also cover the organization and function of government agencies at the federal, state, and local levels. The interrelations of health and welfare departments are examined and their combined efforts analyzed in terms of their effectiveness in meeting health needs. Their sources of funds and primary expenditures are reviewed. Some attention will be given

to the influence of the Constitution on health programs at the state and local levels.

The local health department and its programs are studied in detail. The roles of the staff members, i.e., public health officer, public health nurse, sanitarian, and health educator, are examined in relation to each of its major programs: (1) recording vital and other health statistics, (2) environmental health, (3) communicable disease control, (4) maternal and child health, (5) chronic disease control and adult health, (6) laboratory services, and (7) health education. Methods and materials used in health education are also discussed.

The course covers the elements of demographic data, or census information, and where such information may be found. You will learn what vital statistics are and what computations are necessary to produce statistical measures such as distributions, averages, rates, and ratios. Demographic data and vital statistics are tools of public health, and how they are used in planning, research, and general surveillance of the health status of the population is covered in this course.

The course discusses voluntary agencies which are unique to this country. Their origins, philosophy, and goals are presented at length. The different forms of financial support, i.e., endowments, donations, campaign subscriptions, patient fees, membership dues, or contracts, are compared and the resulting programs and delivery of health services discussed. The operation of international agencies concerned with worldwide health problems is also studied.

Comprehensive health planning is a new and innovative approach to meeting the health needs of a community on a priority basis. This course will examine the steps involved in the planning process in an attempt to provide you with an appreciation of the need for a goal-oriented approach to better health. The objective is to point out the shortcomings of services that arise out of meeting crises. Also stressed is the need for health planners to work cooperatively with those who are responsible for making political, economic, and educational plans for the community.

You will consider epidemiology as a body of knowledge and as a method of investigating the health-disease process. You will review the principles and procedures which characterize scientific investigation. The relationships of a host organism and a disease-causing agent, and their influence on the infection process, and steps for eradication of disease problems are examined in detail.

The course will survey the medical care system--organizations which provide health services for treating the sick. You will study factors which have led to greater involvement of the government in providing medical care as well as methods of financing medical care. The different medical professions involved in rendering medical care are reviewed briefly.

The course concludes with a brief look at the role of referral systems in ensuring the best use of community health services by referring clients to appropriate health agencies.

COURSE ORGANIZATION

This course is divided into ten units. Each unit covers one topic and is designed to help you accomplish one instructional goal. The titles and goals for each unit are listed below.

Unit One Major Health Problems in the United States

The goal of this unit is to become aware of the major causes of illness, disability, and death; their prevalence and trends.

Unit Two Historical Development of Preventative Medicine and Public Health

The goal of this unit is to become acquainted with the history of health care, the changes in our way of life that have affected recent procedures in health care, and the types of agencies and services available today.

Unit Three Organization of Federal, State and Local Government Agencies

The goal of this unit is to become familiar with agencies at the federal, state and local levels which are engaged in solving health problems.

Unit Four The Local Health Department

The goal of this unit is to understand the role of the local health department in promoting, protecting, and controlling the health of the community.

Unit Five

The Tools of Public Health

The goal of this unit is to understand the components of demographic data and vital statistics and their usefulness in planning and evaluating public health programs.

Unit Six

Voluntary Health Agencies

The goal of this unit is to become familiar with the organization of voluntary agencies and the role they have in maintaining, protecting, and promoting community health.

Unit Seven

Comprehensive Health Planning

The goal of this unit is to understand the planning process and the fact that all factions of the community must be involved in order to meet health needs and to assure the most effective use of facilities and services.

Unit Eight

Epidemiology - The Disease Process

The goal of this unit is to understand the historical background in the development of disease and the factors involved which determine whether a condition or disease will spread or become acute or chronic and how it can be prevented, controlled, or eliminated.

Unit Nine

The Medical Care System

The goal of this unit is to become familiar with the organization of both the public and private sectors of the medical care system.

Unit Ten

Using Community Health Services

The goal of this unit is to become familiar with the types of programs and agencies that are available for assisting individuals with health needs and directing them to the appropriate community health services.

INSTRUCTIONAL RESOURCES

Four types of materials are provided for you as instructional resources.

Student Manual

This is the book you are reading now. It contains information on the scope and sequence of the course, how to use the Unit Study Guides, examination procedures and grading, time limits for completing the course and how to get help when you need it.

Unit Study Guides

This book provides you with information about the topics you will study, the objectives you should attain, reading assignments and how to study efficiently. It also contains self-diagnostic tests for you to use to check your knowledge of the material covered in each unit.

Textbook

Henkel, Barbara. Community Health. Boston: Allyn and Bacon, 1970.

Supplemental Readings

This book contains supplemental readings of two types: journal reprints and informative articles written by the author of the course to cover material not included in the textbook.

INSTRUCTIONAL STRATEGIES

If you were to take this course on a university campus, you would likely be meeting with an instructor two or three times a week in class periods. He would give assignments, offer suggestions for study, and lecture over important material not covered in the textbook. In this off-campus self-instructional course, you will not be meeting with an instructor in class. The things normally provided in class are going to be provided by the Unit Study Guides. So, let's look closely at each of the sections in the Unit Study Guides and how each one will be helpful to you in your study of this course. For each unit the study guide provides an introduction, a study map, a goal and instructional objectives, self-diagnostic tests, study suggestions and assignments.

Introduction

Before starting each unit, you will want to turn to the study guide for a brief introduction to the material the unit will cover. It will provide a brief overview and help you understand why it is important to study the material in the unit.

Study Map

The study map outlines, in graphic form, the most efficient way to work through each unit. It tells you when and how to use the self-diagnostic tests to greatest advantage, and takes you step-by-step through the unit.

Goal and Objectives

The goal should communicate to you in broad terms a general statement of what you are expected to learn in a unit. The performance objectives describe exactly what you are expected to know or do upon completion of the unit. It is these competencies that the tests will measure. The objectives answer the question: "What

should I really concentrate on?" and therefore they are a valuable study aid.

Diagnostic Pre-Test

Two diagnostic tests (with answer keys) are provided for each unit: a Diagnostic Pre-Test and a Post-Test. They may be used by you to determine how well you know the material in the unit. Both of these tests are very similar to the test you will take for credit, and if you can pass them you will be able to pass the Credit Exam.

The Diagnostic Pre-Test may be used to check your knowledge of the material to be studied in a unit before you begin work on that unit. You may already know a good deal about a unit before you start and may not need to study the material covered in that unit. If, after looking at the objectives for a unit, you feel that this is the case, take the Diagnostic Pre-Test and make sure. If you pass the Pre-Test, you already know the material covered in that unit and may feel comfortable about going on to the next unit. You will be graded on how well you perform on the Credit Exam, not on whether you have studied the material.

There are other ways in which the Diagnostic Pre-Test can be used. It can serve to indicate to you just what material you will be required to know. In addition, if you have taken the Pre-Test before working through a unit, you will see the difference between your Pre-Test and Post-Test scores and will know how much you have learned.

Study Suggestions

This section contains information on how the subject matter in the unit will be tested and suggestions on how to study the material. In some units the same subject matter may be tested in different ways and this section will explain the way in which this will be done.

Assignments

There are two types of reading assignments for this course: general and review. The General Assignments list all the reading assignments you should do for a unit. The Review Assignments refer you to the portions of the General Assignment which you should restudy if you miss questions on the Diagnostic Post-Test. The Review Assignments for a unit list, for each test question, the pages in the text or the paragraphs in the supplemental reading which contain the material you must know to answer that question.

Diagnostic Post-Test

A Diagnostic Post-Test is provided in each unit for you to use to check your mastery of the material covered in that unit. Take the Post-Test after you have worked through the unit and you feel you have mastered the material outlined in the objectives for that unit. Check your answers with the key, and if you pass the test, go on to the next unit. If you miss items on the Post-Test, restudy the material indicated in the Review Assignments for the questions you missed and take the test again. When you can successfully answer all the questions on the test, go on to the next unit.

Summary

As you start each unit, read the introduction for the unit, and then the goal and objectives. If you think you already know the material covered in the unit, try the Diagnostic Pre-Test. If you do need to study the material, read the Study Suggestions and work through the General Assignment. After you study the assignment, take the Diagnostic Post-Test. Use the Review Assignments to help you restudy any material you may have missed on the test. When you can pass the Post-Test, go on to the next unit. These steps are summarized for you in the Study Map at the beginning of each unit.

EXAMINATION PROCEDURES

Since your final grade will be determined by your performance on the examinations, it is important you understand how these credit examinations are carried out.

You are required to take three short answer examinations. They are:

<u>Exam</u>	<u>Units Covered</u>
1	One through Four
2	Five through Seven
3	Eight through Ten

Procedures

You have contracted the time, date, and place the exams will be given. If you cannot take an exam on the scheduled date, you should contact the proctor, reschedule the exam, and submit a Change of Exam Schedule to the IPCD office in Mt. Pleasant, MI, 48859.

GRADES AND GRADING

Since no classroom or "class" exists for this course, your grade is based on attainment of course objectives, not on a normal learning curve for some group. Each examination will be assigned a raw score and a percentage score. The final course grade will be determined by adding the raw scores of all three exams and deriving the percentage of all correct items for all possible items. Letter grades will then be assigned in accordance with the following grade scale:

90% to 100%	= A
80% to 89%	= B
70% to 79%	= C
60% to 69%	= D
59% or lower	= E

After you have completed an exam, the proctor will provide you with a copy. It will show the questions you answered incorrectly, permitting you to grade yourself. Each exam question will be cross referenced to the unit's learning objective so that you will be able to restudy the objectives you missed.

The graded examinations will generally be returned to you within 10 days after the completed exams have been received by the Institute.

If you have questions concerning examination or grading procedures, contact the Institute at (517) 774-3865.

TIME LIMITS

It is recommended that this course be completed in twelve weeks or less. This will require perseverance and considerable work, but the overall learning experience will be more desirable if the course is completed in a concentrated time period.

If you wish to complete all the course requirements in less time, you are encouraged to do so. There is no minimum time period.

In the event everything is not completed within the time specified in your Learning Package Contract, you will receive an incomplete grade. This incomplete can be made up by completing all the course requirements. However, if you do not complete the course within a period of twelve months and wish to continue, you will be required to register for the course again.

HELP!

What do you do if you need help?

If you have a problem related to course work, contact your instructor. If your question relates to missing materials, lost exam, inability to take an examination at a scheduled time, or any question about the administrative nature of the course, contact the Institute.

If at any time you cannot contact your instructor after repeated efforts, contact the Institute either by mail or phone.

When you call the Institute, your questions will be dealt with quickly if you

1. give your name and identify yourself as an IPCD student
2. state that you have a problem or question relating to the Community Health course.

It may occasionally take some time to locate the person who can answer your question, but we will honestly try to answer all questions in the same day.

If, even after we've tried to solve your problem, you feel you still don't have the answer, tell us so. Let us try again.

The telephone number of the Institute is (517) 774-3865.

BACKTALK

Enclosed in the manila envelope of "Additional Materials" is a Course Evaluation Opinionnaire that is to be filled out by students using this instructional package. The information that you provide to the author and course designers helps to develop instructional packages which are better designed, are more effective forms of instruction, and which will ultimately serve the educational needs of students better.

The Course Evaluation Opinionnaire consists of two parts-- a set of specific questions related to various aspects of this instructional package, and a separate sheet for personal reactions, opinions, constructive criticisms, etc. formed in your own words.

Make no mistake! This, as other instructional packages, will be revised and improved by the comments provided by you and other students. Help us out.

AFTERWORD

As a student of this course, you will spend considerable time and effort toward achieving new knowledge, skills, and competence. Your "learning effort" is just beginning. Our "teaching effort" has been going on for sometime and has produced this package of learning materials.

In this course you will never have to "psyche-out" the instructor. The objectives tell you very precisely what you will be expected to learn. Nor will you be surprised by some unexpected or tricky questions because, logically, the test questions are directly related to the stated objectives.

When you take the Credit Exams (which determine your grade), you should know pretty well how you are going to do on those examinations. We have included for each unit, not one, but two self-diagnostic tests that allow you to check your own exam readiness.

As teachers of this course, we have earnestly tried to select and create the best possible resources and activities to help you learn effectively, efficiently, and without any compromise of academic standards.

To make certain, we have had real students, like yourself, try out this course. These students have spotted errors and helped us to smooth out the rough spots. Most of their suggestions have been used. (In fact, this course is the product of several earlier prototype versions.)

Of course, teaching and learning is a cooperative enterprise. Teacher and student must both do their jobs. We feel certain that most students giving reasonable effort to this course will be successful. We want you to be successful too.

ACKNOWLEDGEMENTS

This course has been produced through the combined and creative efforts of numerous individuals.

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